INDEX OF AUTHORS' NAMES.

TRANSACTIONS AND PROCEEDINGS. 1913.

(Marked T. and P. respectively.)

A.

Abram, *Harold Helling*. See *Walter Craven* **Ball**.

Agashe, *Ganesh Sakharan*. See *Charles* **Weizmann**.

Akers, *Noel Charles*. See *Ernest* **Goulding**.

Applebey, *Malcolm Percival*, the determination of viscosity, T., 2167; P., 361.

Applebey, *Malcolm Percival*, and *David Leonard* **Chapman**, the latent heat of vapours; preliminary note, P., 24.

Atack, *Frederick William*, the nickel salts of the benzildioximes, T., 1317; P., 195.

Atkins, *William Ringrose Gelston*, guaiacum resin as a reagent for the detection of oxydases and of minute traces of copper, P., 303.

Atkins, *William Ringrose Gelston*, and *Thomas Arthur* **Wallace**, the molecular condition of mixed liquids. Part I. Mixtures of the lower aliphatic alcohols with water, T., 1461; P., 194.

Auld, *Samuel James Manson*, and *Thomas Duncan* **Mosscrop**, the measurement of tryptic protein hydrolysis by determination of the tyrosine liberated, T., 281; P., 14.

B.

Bain, (*Miss*) *Alice Mary*. See *William Hobson* **Mills**.

Bainbridge, *Ernest Graham*, the hydrolysis of ethylene glycol diacetate; preliminary note, P., 4.

Baker, *Frank*, the viscosity of cellulose nitrate solutions, T., 1653; P., 244.

Baker, *Herbert Brereton*, and *Leslie Henry* **Parker**, the interaction of sodium amalgam and water, T., 2060; P., 298.

Ball, *Walter Craven*, and *Harold Helling* **Abram**, bismuthinitrites, T., 2110; P., 150.

the nitrites of thallium, lithium, cæsium, and rubidium, T., 2130; P., 197.

Baly, *Edward Charles Cyril*, the Baly-Krulla theory of fluorescence; a reply to A. K. Macbeth, P., 201.

Baly, *Edward Charles Cyril*, and *Francis Owen* **Rice**, chemical reactivity and absorption. Part II. The variation of absorption with concentration, T., 91.

absorption spectra and chemical reactivity. Part III. Trinitrobenzene, trinitroanisole, and picric acid, T., 2086; P., 216.

Banerji, *Haridas*. See *Barun Chandra* **Dutt**.

Barger, *George*, and *Walter William* **Starling**, blue adsorption compounds of iodine. Part II. The influence of constitution on the adsorption by 2- and 4-pyrone derivatives, P., 128.

Barker, *Matthew Felix*. See *Martin Onslow* **Forster**.

Barker, *Thomas Vipond*, and *James Ernest* **Marsh**, optical activity and enantiomorphism of molecular and crystal structure, T., 837; P., 62.

Barrett, *Frank Leslie*. See *Morris* **Fort**.

Barrett, *William Henry*. See *Harold Brewer* **Hartley**.

Barrow, *Fred*. See *Alexander* **McKenzie**.

Bartlett, (*Miss*) *Dorothy Jessie*. See *Arthur William* **Crossley**.

Bassett, *Harold Llewellyn*, the decomposition of hydrogen peroxide by colloidal platinum, P., 56.

Baxter, *Robert Reginald*. See *Frederick Daniel* **Chattaway**.

Beesley, *Richard Moore*, and *Jocelyn Field* **Thorpe,** a new series of ring compounds; preliminary note, P., 346.

Bell, *Norman Murray*. See *Alfred* **Holt.**

Benson, *Percy*. See *Albert Ernest* **Dunstan.**

Bingham, *Eugene Cook*, a criticism of some recent viscosity investigations, T., 959; P., 113.

Bissett, *Crellyn Colgrave*. See *William Ernest Stephen* **Turner.**

Blackstock, *Gibbs*, and *William Henry* **Perkin,** *jun.*, the action of αγ-dibromobutane on the sodium derivative of ethyl malonate, P., 74.

Boisbaudran, *Paul Émile (dit François) Lecoq de*, obituary notice of, T., 742.

Bourdillon, *Robert*, the preparation of conductivity water, T., 791; P., 124.

Bourdillon, *Robert*. See also *Harold Brewer* **Hartley.**

Bousfield, *William Robert*, ionisation and the law of mass action, T., 307; P., 3.

ionisation and the law of mass action. Part II. The osmotic data in relation to combined water, P., 371.

Brady, *Oscar Lisle*, the constitution of aconitine, T., 1821; P., 253.

Brady, *Oscar Lisle*, and *Frederick Percy* **Dunn,** the isomerism of the oximes. Part I. The diphenylcarbamyloximes, T., 1613; P., 248.

the isomerism of the oximes. Part II. The nitrobenzaldoximes, T., 1619; P., 248.

Brady, *Oscar Lisle*. See also *Philip Wilfrid* **Robertson.**

Bramley, *Arthur*. See *James Charles* **Philip.**

Branch, *Gerald Eyre Kirkwood*. See *Arthur Walsh* **Titherley.**

Brannigan, *Peter Joseph*, *Alexander Killen* **Macbeth**, and *Alfred Walter* **Stewart,** the absorption spectra of substances containing labile hydrogen atoms, T., 406; P., 58.

Brazier, *Sidney Albert*. See *Thomas Slater* **Price.**

Bredt, *Julius*, and *William Henry* **Perkin,** *jun.*, *l*-epicamphor (*l*-β-camphor), T., 2182; P., 356.

Burgen, *Peter*. See *George Francis* **Morrell.**

Burgess, *Maurice John*, and *Richard Vernon* **Wheeler,** the distillation of coal in a vacuum, P., 376.

Burrows, *George Joseph*, and *Charles Edward* **Fawsitt,** the decomposition of carbamide, P., 264.

C.

Cain, *John Cannell*, *Albert* **Coulthard,** and (*Miss*) *Frances Mary Gore* **Micklethwait,** studies in the diphenyl series. Part V. Derivatives and substitution products of the two isomeric *o*-dinitrobenzidines and synthesis of derivatives of benzerythrene, T., 2074; P., 289.

Cain, *John Cannell*, *Alexander Killen* **Macbeth,** and *Alfred Walter* **Stewart,** studies in the diphenyl series. Part IV. The absorption spectra of the two isomeric *o*-dinitrobenzidines, T., 586; P., 77.

Cain, *John Cannell*, and *John Lionel* **Simonsen,** nitro-acids derived from 2:3-dimethoxybenzoic acid and 4-methoxyphthalic acid, P., 380.

Cain, *John Cannell*, *John Lionel* **Simonsen,** and *Clarence* **Smith,** synthesis of unsymmetrical derivatives of deoxybenzoin, T., 1035; P., 172.

Campbell, *Colin*, and *Albert* **Parker,** the preparation and analysis of methane, T., 1292; P., 130.

Campbell, *Lawrence Eversley*. See *John Ralph* **Furlong.**

Cardwell, *David*. See *Martin Onslow* **Forster.**

Carr, *Francis Howard*, and *Frank Lee* **Pyman,** the alkaloids of ipecacuanha; preliminary note, P., 226.

Caw, *William*. See *George Gerald* **Henderson.**

Challenger, *Frederick*, organic derivatives of bismuth; preliminary note, P., 76.

Chapman, *Alfred Chaston*, the action of tartaric acid on tin in the presence of oxygen, T., 775; P., 122.

the nitrogenous constituents of hops; preliminary note, P., 182.

Chapman, *David Leonard*, and *Leo Kingsley* **Underhill,** the interaction of chlorine and hydrogen; the influence of mass, T., 496; P., 75.

Chapman, *David Leonard*. See also *Malcolm Percival* **Applebey.**

Chattaway, *Frederick Daniel*, interaction of glycerol and oxalic acid, P., 383.

Chattaway, *Frederick Daniel*, and *Robert Reginald* **Baxter,** the action of nitrogen iodide on methyl ketones, T., 1986; P., 284.

Chattaway, *Frederick Daniel*, and *Alfred Bertie* **Constable,** derivatives of *p*-iodoaniline, P., 304.

Chatterji, *Bamacharan*. See *Barun Chandra* **Dutt.**

Clark, *Arthur Herbert,* and *Richard Vernon* **Wheeler** [with *Claude Bernard* **Platt**], the volatile constituents of coal. Part III., T., 1704; P., 250.

Clarke, *George,* phytin and phytic acid; preliminary note, P., 27.

Clarke, *Hans Thacher,* the relation between residual affinity and chemical constitution. Part IV. Some open-chain compounds, T., 1689; P., 249.

Clarke, *Hans Thacher, Alexander Killen* **Macbeth,** and *Alfred Walter* **Stewart,** colours produced by tetranitromethane with compounds containing elements capable of showing change in valency, P., 161.

Clewer, *Hubert William Bentley.* See *Frank* **Tutin.**

Clough, *George William,* the optical rotatory power of derivatives of succinic acid in aqueous solutions of inorganic salts. Part I., P., 352.

note on the configurations of the optically active normal secondary alcohols, P., 357.

Clough, *George William.* See also *Alexander* **McKenzie.**

Coade, (*Miss*) *May Emily,* and *Emil Alphonse* **Werner,** the estimation of nitrites by means of thiocarbamide, and the interaction of nitrous acid and thiocarbamide in the presence of acids of different strength, T., 1221; P., 188.

Collie, *John Norman,* and *Hubert Sutton* **Patterson,** the presence of neon in hydrogen after the passage of the electric discharge through the latter at low pressures. Parts I. and II., T., 419; P., 22, 79, 217.

Constable, *Alfred Bertie.* See *Frederick Daniel* **Chattaway.**

Coppin, *Noel Guilbert Stevenson,* and *Arthur Walsh* **Titherley,** the condensation of chloral hydrate and carbamide, P., 353.

Coulthard, *Albert.* See *John Cannell* **Cain.**

Courtman, *Harold Reuben.* See *Thomas Martin* **Lowry.**

Crompton, *Holland,* and (*Miss*) *Wilhelmina Rebecca* **Smyth,** the refractivities of acenaphthene and its monohalogen derivatives, T., 1302; P., 224.

Crossley, *Arthur William,* derivatives of *o*-xylene. Part VI. 5-Bromo-*o*-3-xylenol, T., 2179; P., 352.

Crossley, *Arthur William,* and (*Miss*) *Dorothy Jessie* **Bartlett,** derivatives of *o*-xylene. Part V. 5-Bromo-*o*-4-xylenol and 6-bromo-*o*-4-xylenol, T., 1297; P., 217.

Crossley, *Arthur William,* and *Walter Ryley* **Pratt,** derivatives of *o*-xylene. Part III. The presence of a mobile nitro-group in each of the two trinitro-*o*-xylenes, T., 982; P., 169.

Crossley, *Arthur William,* and (*Miss*) *Nora* **Renouf,** aromatic compounds obtained from the hydroaromatic series. Part III. Bromoxylenols from dimethyldihydroresorcin, P., 369.

Crossley, *Arthur William,* and *Sydney* **Smith,** derivatives of *o*-xylene. Part IV. Synthesis of 4:5-dibromo-3-*o*-xylenol, T., 989; P., 170.

Crowther, *Horace Leslie,* and *Hamilton* **McCombie,** the formation of tetrahydro-oxazoles from α-hydroxy-β-anilino-αβ-diphenylethane and its homologues, T., 27.

the action of chlorine on thymol and on *m*-cresol, T., 536; P., 68.

Cumming, *Alexander Charles,* and *John* **Macleod,** the estimation of mercury as metal by the dry method, T., 513; P., 77.

Cumming, *Alexander Charles.* See also *Thomas Matthew* **Finlay.**

Cundall, *James Tudor,* the action of sulphuric acid on copper, P., 344.

Cunningham, (*Miss*) *Mary.* See *Charles* **Dorée.**

D.

Dakin, *Henry Drysdale,* and *Harold Ward* **Dudley,** the interconversion of α-hydroxy-acids and α-ketonic aldehydes; a reversible reaction, P., 156.

the conversion of α-amino-acids into α-ketonic aldehydes, and their relation to α-hydroxy-acids, P., 192.

Dale, (*Miss*) *Alice Barbara.* See (*Miss*) *Gwen* **Dyer.**

Datta, *Rasik Lal,* the double platinic and cupric iodides of substituted ammonium bases, T., 426; P., 79.

Datta, *Rasik Lal,* and *Haridas* **Mukherjea,** double carbonates of the alkaline earth metals and lead with potassium carbonate, P., 185.

Davies, *Morton James Pryce.* See *Alexander* **Findlay.**

Dawson, *Harry Medforth,* keto-enolic tautomerism and the absorption spectra of the aliphatic ketones, T., 1308; P., 130.

Dawson, *Harry Medforth,* and *Frank* **Powis,** the catalytic activity of acids; evaluation of the activities of the hydrogen ion and the undissociated acid, T., 2135; P., 308.

De, *Rajendralal*. See *Prafulla Chandra* **Rây**.

Denham, *William Smith*, and (*Miss*) *Hilda* **Woodhouse**, the methylation of cellulose, T., 1735; P., 251.

the action of sulphur chloride and of thionyl chloride on metallic salts of organic acids; preparation of anhydrides, T., 1861; P., 261.

Dey, *Biman Bihari*, condensation of acetonedicarboxylic acid with phenols, P., 154.

Dey, *Biman Bihari*. See also *Hemendra Kumar* **Sen-Gupta**.

Dey, *Manik Lal*. See *Prafulla Chandra* **Rây**.

Dhar, *Nilratan*. See *Prafulla Chandra* **Rây**.

Dickson, *Thomas William*. See *Thomas Martin* **Lowry**.

Divers, *Edward*, obituary notice of, T., 746.

Dixon, *Augustus Edward*, and *John* **Taylor**, cyanogen bromide and cyanogen, T., 974; P., 113.

Dobbie, *James Johnston*, and *John Jacob* **Fox**, the relation between the absorption spectra and constitution of piperine, nicotine, cocaine, atropine, hyoscyamine, and hyoscine, T., 1193; P., 180.

Dobbie, *James Johnston*, *John Jacob* **Fox**, and *Arthur Josiah Hoffmeister* **Gange**, diphenylene. Part II., T., 36.

Dorée, *Charles*, the action of ozone on cellulose. Part IV. Cellulose peroxide, T., 1347; P., 222.

Dorée, *Charles*, and (*Miss*) *Mary* **Cunningham**, the action of ozone on cellulose. Part III. Action on beech wood (lignocellulose), T., 677; P., 104.

Drugman, *Julien*. See *Harold Brewer* **Hartley**.

Dudley, *Harold Ward*. See *Henry Drysdale* **Dakin**.

Dunn, *Frederick Percy*. See *Oscar Lisle* **Brady**.

Dunstan, *Albert Ernest*, *Thomas Percy* **Hilditch**, and *Ferdinand Bernard* **Thole**, the relation between viscosity and chemical constitution. Part VII. The effect of the relative position of two unsaturated groups on viscosity, T., 133.

Dunstan, *Albert Ernest*, and *Ferdinand Bernard* **Thole**, the relation between viscosity and chemical constitution. Part VI. Viscosity an additive function, T., 127.

Dunstan, *Albert Ernest*, *Ferdinand Bernard* **Thole**, and *Percy* **Benson**, the relation between viscosity and chemical constitution. Part VIII. Some homologous series, P., 378.

Dunstan, *Albert Ernest*. See also *Ferdinand Bernard* **Thole**.

Dutt, *Barun Chandra*, *Bamacharan* **Chatterji**, and *Haridas* **Banerji**, the action of nitric oxide on a neutral solution of potassium permanganate, P., 235.

Dyer, (*Miss*) *Gwen*, and (*Miss*) *Alice Barbara* **Dale**, catalytic decomposition of hydrogen peroxide, P., 55.

E.

Earl, *John Campbell*. See *Samuel Shrowder* **Pickles**.

Elsden, *Alfred Vincent*, and *John Firth* **Stansfield**, the estimation of small quantities of lead, T., 1039; P., 173.

Ewins, *Arthur James*, the constitution of cytisine, the alkaloid of *Cytisus laburnum*. Part I. The synthesis of α-cytisolidine and of β-cytisolidine, T., 97.

Ewins, *Arthur James*, and *Harold* **King**, the synthesis of some new dimethyltetrahydroquinolines, T., 104.

F.

Fargher, *Robert George*, and *William Henry* **Perkin**, *jun.*, the action of αγ-dibromobutane on the sodium derivatives of ethyl acetoacetate and benzoylacetate, P., 72.

Fawsitt, *Charles Edward*. See *George Joseph* **Burrows**.

Findlay, *Alexander*, and *Morton James Pryce* **Davies**, the reduction of mercuric chloride by sodium formate, T., 1550; P., 250.

Findlay, *Alexander*, and *George* **King**, rate of evolution of gases from supersaturated solutions. Part I. Influence of colloids and of suspensions of charcoal on the evolution of carbon dioxide, T., 1170; P., 173.

Findlay, *Alexander*, and *Thomas* **Williams**, the influence of colloids and fine suspensions on the solubility of gases in water. Part III. Solubility of carbon dioxide at pressures lower than atmospheric, T., 636; P., 115.

Finlay, *Thomas Matthew*, and *Alexander Charles* **Cumming**, the estimation of zinc as zinc ammonium phosphate and zinc pyrophosphate, T., 1004; P., 153.

Firth, *James Brierley*, the alleged permeability of glass to halogen vapours, P., 111.

Fleck, *Alexander*, the chemical nature of some radioactive disintegration products. Parts I. and II., T., 381, 1052; P., 7, 172.

the relation of uranous salts to thorium, P., 383.

Fletcher, *Arnold Lockhart*, the fractionation of alloys and minerals in the electric micro-furnace, T., 2097; P., 134.

Fletcher, *James*, and *Daniel* **Tyrer**, the latent heats of chloroform and benzene and of their mixtures between 0° and 80°, T., 517.

Forster, *Martin Onslow*, studies in the camphane series. Part XXXIV. Configuration of the eight oximino-derivatives of camphorquinone, T., 662; P., 104.

Forster, *Martin Onslow*, and *Matthew Felix* **Barker**, constitution of furoxans (dioxime "peroxides"), T., 1918; P., 152.

Forster, *Martin Onslow*, and *David* **Cardwell**, constitution of aliphatic diazo-compounds, T., 861; P., 150.

geranyl chloride, T., 1338; P., 244.

Forster, *Martin Onslow*, and *Hubert Arthur Harry* **Howard**, studies in the camphane series. Part XXXIII. Orientation of Tiemann's *iso*aminocamphor, T., 63.

Forster, *Martin Onslow*, and *John Charles* **Withers**, Vaubel's supposed phenyldi-imine, T., 266, P., 24.

Forsyth, *William Collins*. See *Thomas Stewart* **Patterson**.

Fort, *Morris*, and *Frank Leslie* **Barrett**, the constitution of phenolphthalein and its alkali salts, P., 270.

Foulds, *Robinson Percy*, and *Robert* **Robinson**, 2-phenyl-5-styryloxazole, T., 1768; P., 261.

Fowler, *Gilbert John*, and *Ernest Moore* **Mumford**, the bacterial oxidation of phenol, P., 156.

Fox, *John Jacob*, and *Frank George* **Pope**, the absorption spectra of some thio-derivatives of benzene, T., 1263; P., 194.

Fox, *John Jacob*. See also *James Johnston* **Dobbie**.

Francis, *Francis Ernest*, and *Frank Henry* **Geake**, a new method for the determination of the concentration of hydroxyl ions, T., 1722; P., 249.

Francis, *Francis Ernest*, and *Francis George* **Willsdon**, some derivatives of phorone. Part I., T., 2238; P., 302.

Frankland, *Edward Percy*, and *Henry Edgar* **Smith**, carbamido- and other derivatives of $\alpha\beta$-dipropylamino- and $\alpha\beta$-diallylamino-propionic acids T., 998; P., 158.

Frankland, *Percy Faraday*, presidential address, T., 713.

Furlong, *John Ralph*, and *Lawrence Eversley* **Campbell**, a new variety of manna and a note on the melting point of dulcitol, P., 128.

G.

Garner, *William Edward*, a new model to illustrate the Walden inversion, P., 198.

Garrett, *Charles Scott*, the change of colour of metallic haloid solutions, T., 1433; P., 225.

Garrett, *Charles Scott*. See also *James Colquhoun* **Irvine**.

Gauge, *Arthur Josiah Hoffmeister*. See *James Johnston* **Dobbie**.

Geake, *Frank Henry*. See *Francis Ernest* **Francis**.

Ghosh, *Kedar Nath*, and *Edwin Roy* **Watson**, hydroxyquinol-phthalein anhydride and hydroxyquinol-benzein, P., 9.

Gilling, *Charles*, substituted dihydroresorcins; 1-methyldihydroresorcin and 2-methyldihydroresorcin, T., 2029; P., 286.

Gilmour, *Robert*, synthesis of a methyl tetrose; preliminary note, P., 108.

a contribution to the study of the constitution of the methyl pentoses. Part I. The synthesis of an *i*-methyl tetrose and an *i*-methyl tetritol, P., 363.

Glover, *Walter Hamis*. See *Thomas Martin* **Lowry**.

Gluud, *Wilhelm*, allylamine derivatives, T., 940; P., 118.

the synthesis of *o*-aldehydophenylglycine, T., 1251; P., 190.

note on the identification of proline, P., 177.

Gluud, *Wilhelm*, and *Richard* **Kempf**, a new method of preparing *m*-chlorobenzoic acid and the investigation of its hydroxylamine salt, T., 1530; P., 244.

Goulding, *Ernest*, and *Noel Charles* **Akers**, note on the fat of the seeds of *Oncoba echinata*; occurrence of chaulmoogric acid, P., 197.

Gray, *Francis William*, an adiabatic calorimeter, P., 376.

Green, *Arthur George*, quinonoid addition as the mechanism of dyestuff formation, T., 925; P., 116.

Green, *Arthur George*, and *William* **Johnson**, the constitution of aniline-black. Part IV., P., 276.

Green, *Arthur George*, and *Frederick Maurice* **Rowe**, quinonoid salts of nitroanilines, T., 508; P., 66.

the constitution of oxadiazole oxides (furazan oxides or dioxime peroxides), T., 897; P., 152.

the conversion of *o*-nitroamines into *iso*oxadiazole oxides (furoxans), T., 2023; P., 275.

Gupta, *Nalini Mohan*, lead cyanide, P., 361.

H.

Haas, *Paul*, dibenzoyldiaminoacetic acid, T., 1304; P., 228.

Harper, *Ernest Magowan*, and *Alexander Killen* **Macbeth**, the interaction of tetranitromethane and compounds containing centres of residual affinity; preliminary note, P., 304.

Hartley, *Ernald George Justinian*, a case of isomerism in the methylated ferrocyanides, T., 1196; P., 188.

Hartley, *Harold Brewer*, and *William Henry* **Barrett**, notes on the determination of the electrical conductivity of solutions, T., 786; P., 132.

Hartley, *Harold Brewer*, *Julien* **Drugman**, *Charles Archibald* **Vlieland**, and *Robert* **Bourdillon**, the neutral and acid oxalates of potassium, T., 1747; P., 252.

Haworth, *Walter Norman*, cantharene and other hydrocarbons allied to the terpenes, T., 1242; P., 193.

Haworth, *Walter Norman*, and *William Henry* **Perkin**, *jun.*, synthesis of *d*- and *l*-sylvestrene, T., 2225; P., 356.

Haworth, *Walter Norman*, *William Henry* **Perkin**, *jun.*, and *Otto* **Wallach**, sylvestrene; the constitution of *d*-sylvestrene and its derivatives, T., 1228; P., 223.

Heilbron, *Isidor Morris*, and *James Alexander Russell* **Henderson**, hydroxyazo-compounds; the action of semicarbazide hydrochloride on the *p*-quinones, T., 1404; P., 226.

Heilbron, *Isidor Morris*, and *Forsyth James* **Wilson**, contributions to our knowledge of semicarbazones. Part III. Action of heat on the semicarbazones of phenyl styryl ketone and the preparation of the corresponding phenylsemicarbazones, T., 1504; P., 245.

Heilbron, *Isidor Morris*. See also *George Gerald* **Henderson** and *Forsyth James* **Wilson**.

Henderson, *George Gerald*, and *William* **Caw**, contributions to the chemistry of the terpenes. Part XVI. The oxidation of bornylene with hydrogen peroxide, T., 1543; P., 246.

Henderson, *George Gerald*, and *Isidor Morris* **Heilbron**, the *p*-nitrobenzoates of borneol and *iso*borneol, P., 381.

Henderson, *George Gerald*, *James Alexander Russell* **Henderson**, and *Isidor Morris* **Heilbron**, the relationship between the absorption spectra and the constitution of ketones and their derivatives. Part I., P., 354.

Henderson, *James Alexander Russell*. See *Isidor Morris* **Heilbron** and *George Gerald* **Henderson**.

Hewitt, *John Theodore*, (*Miss*) *Rhoda Marianne* **Johnson**, and *Frank George* **Pope**, the structure of the salts of nitrophenols, T., 1626; P., 251.

Hewitt, *John Theodore*, and (*Miss*) *Gladys Ruby* **Mann**, the reaction between ferric salts and thiosulphates, T., 324; P., 30.

influence of acetylacetone on ionic reactions, P., 30.

Hewitt, *John Theodore*. See also *Raphael* **Meldola**.

Higgins, *Sydney Herbert*, the dynamics of bleaching, T., 1816; P., 258.

the bleaching action of hypochlorite solutions, P., 302.

Hilditch, *Thomas Percy*. See *Albert Ernest* **Dunstan**.

Hoff, *Jacobus Henricus van't*, memorial lecture on (Walker), T., 1127; P., 179.

Hollely, *William Francis*. See *Raphael* **Meldola**.

Holmes, *John*, contributions to the theory of solutions; the intermiscibility of liquids, T., 2147; P., 362.

Holmyard, *Eric John*. See *Stanley Isaac* **Levy**.

Holt, *Alfred*, and *Norman Murray* **Bell**, the system: xylene–alcohol–water, P., 383.

Holt, *Alfred*, and *James Eckersley* **Myers**, metaphosphoric acid and its alkali salts, T., 532; P., 61.

phosphonium and ammonium iodides, P., 61.

Hope, *Edward*, and *Frederick Russell* **Lankshear**, the formation of cyclic bases from aromatic imides; preliminary note, P., 224.

Hope, *Edward,* and *Robert* **Robinson,** synthetical experiments in the group of the *iso*quinoline alkaloids. Part III. The constitution of anhydrocotarnineacetophenone, etc., together with an account of some new condensation products of cotarnine, T., 361; P., 63.

Hopwood, *Arthur,* synthesis of polypeptides from the higher fatty acids, P., 345.

Howard, *Hubert Arthur Harry.* See *Martin Onslow* **Forster.**

Hulme, *William,* denitrification the result of enzyme action; preliminary note, P., 117.

the mechanism of denitrification, P., 307.

Hynd, *Alexander.* See *James Colquhoun* **Irvine.**

I.

International Association of Chemical Societies, P., 325.

Irvine, *James Colquhoun,* the nomenclature of sugar derivatives, P., 69.

Irvine, *James Colquhoun,* and *Alexander* **Hynd,** synthetical aminoglucosides derived from *d*-glucosamine, T., 41.

the conversion of *d*-glucosamine into *d*-mannose; preliminary note, P., 306.

Irvine, *James Colquhoun,* and *James Patterson* **Scott,** partially methylated glucoses. Part I. ζ-Monomethyl glucose and γεζ-trimethyl glucose, T., 564; P., 70.

partially methylated glucoses. Part II. βγ-Dimethyl α-glucose and βγ-dimethyl β-glucose, T., 575; P., 71.

Irvine, *James Colquhoun, Robert Fraser* **Thomson,** and *Charles Scott* **Garrett,** the action of ammonia and alkylamines on reducing sugars, T., 238; P., 7.

J.

James, *Thomas Campbell,* the iodocinnamic acids, T., 1368; P., 173.

James, *Thomas Campbell,* and *Clifford William* **Judd,** the addition of negative radicles to Schiff's bases, P., 196.

Jânâ, *Sarat Chandra.* See *Prafulla Chandra* **Rây.**

Jarrard, *William John,* the new oxide of carbon, mellitic anhydride, and derivatives of mellitic acid; preliminary note, P., 106.

Johnson, (*Miss*) *Rhoda Marianne.* See *John Theodore* **Hewitt.**

Johnson, *William.* See *Arthur George* **Green.**

Jones, *Bernard Mouat,* and *Popatlal Govindlal* **Shah,** the spontaneous crystallisation of solutions of potassium chloride, bromide, and iodide, T., 1043; P., 160.

Jones, *David Trevor,* and *Richard Vernon* **Wheeler,** the composition of coal, P., 376.

Jones, *Humphrey Owen,* obituary notice of, T., 755.

Jones, *William Jacob, Arthur* **Lapworth,** and *Herbert Muschamp* **Lingford,** the influence of water on the partial pressures of hydrogen chloride above its alcoholic solutions, T., 252; P., 5.

Joseph, *Alfred Francis,* polybromides in nitrobenzene solution, T., 1554; P., 72.

Jowett, *Hooper Albert Dickinson,* and *Frank Lee* **Pyman,** the alkaloids of *Xanthoxylum brachyacanthum,* T., 290; P., 26.

Joyner, *Reginald Arthur.* See *William Arthur* **Knight.**

Judd, *Clifford William.* See *Thomas Campbell* **James.**

K.

Kay, *Francis William,* and *Amé* **Pictet,** experiments on the synthesis of *apo*morphine, T., 947; P., 131.

Kempf, *Richard.* See *Wilhelm* **Gluud.**

Kenner, *James,* the formation of cyclic compounds from derivatives of 2:2′-ditolyl, T., 613; P., 105.

Kenner, *James,* and *Ernest* **Witham,** 2:2′-ditolyl-5:5′-dicarboxylic acid, T., 232; P., 10.

Kenyon, *Joseph.* See *Thomas Martin* **Lowry** and *Robert Howson* **Pickard.**

King, *Albert Theodore.* See *William Hughes* **Perkins.**

King, *George,* and *Hamilton* **McCombie,** the chlorination of iodophenols. Part II. The chlorination of *o*-haloid derivatives of *p*-iodophenol, T., 220; P., 8.

King, *George.* See also *Alexander* **Findlay.**

King, *Harold.* See *Arthur James* **Ewins.**

Kipping, *Frederic Stanley,* Ladenburg memorial lecture, T., 1871; P., 273.

Kipping, *Frederic Stanley,* and *Robert* **Robison,** organic derivatives of silicon. Part XXI. The condensation products of diphenylsilicanediol, P., 374.

Kipping, *Frederic Stanley.* See also *Robert* **Robison** and *Thomas Alfred* **Smith.**

Knight, *William Arthur*, and *Reginald Arthur* **Joyner**, amalgams containing silver and tin, T., 2247; P., 282.

Krall, *Hans*, guanidine thiocyanate: its formation from ammonium thiocyanate, T., 1378; P., 189.

*iso*melamine; preliminary note, P., 377.

L.

Ladenburg, *Albert*, memorial lecture on (KIPPING), T., 1871; P., 273.

Lankshear, *Frederick Russell*. See *Edward* **Hope**.

Lapworth, *Arthur*, oxidation of sphingosine and the isolation and purification of cerebrone, T., 1029; P., 154, 175.

note on the mechanism of α-bromination in ketones, P., 289.

Lapworth, *Arthur*. See also *William Jacob* **Jones**.

Lefebure, *Victor*, absorption of gases by celluloid, P., 368.

Le Sueur, *Henry Rondel*, preparation of secondary amines from carboxylic acids. Part III. Disecondary amines from dicarboxylic acids, T., 1119; P., 189.

resolution of α-anilinostearic acid, T., 2108; P., 306.

Levy, *Stanley Isaac*, the action of amino-acid esters on ethyl dicarboxyglutaconate, P., 353.

Levy, *Stanley Isaac*, *Eric John* **Holmyard**, and *Siegfried* **Ruhemann**, an attempt to resolve an oxonium salt, P., 159.

Levy, *Stanley Isaac*. See also *Siegfried* **Ruhemann**.

Lewcock, *William*. See *Robert Howson* **Pickard**.

Lingford, *Herbert Muschamp*. See *William Jacob* **Jones**.

Lowry, *Thomas Martin*, the rotatory dispersive power of organic compounds. Part I. The measurement of rotatory dispersion, T., 1062; P., 171.

the rotatory dispersive power of organic compounds. Part III. The measurement of magnetic rotatory dispersion, T., 1322; P., 221.

the rotatory dispersive power of organic compounds. Part IV. Magnetic rotation and dispersion in some simple organic liquids, P., 221.

Lowry, *Thomas Martin*, and *Harold Reuben* **Courtman**, studies of dynamic isomerism. Part XV. The influence of light on isomeric change, T., 1214; P., 168.

Lowry, *Thomas Martin*, and *Thomas William* **Dickson**, the rotatory dispersive power of organic compounds. Part II. The form of the rotatory dispersion curves, T., 1067; P., 171.

anomalous rotatory dispersion; preliminary note, P., 185.

Lowry, *Thomas Martin*, and *Walter Hamis* **Glover**, studies of dynamic isomerism. Part XIV. Successive isomeric changes in camphorcarboxylamide and camphorcarboxypiperidide, T., 913.

Lowry, *Thomas Martin*, *Robert Howson* **Pickard**, and *Joseph* **Kenyon**, the rotatory dispersive power of organic compounds. Part V. A comparison of the optical and magnetic rotatory dispersions in some optically active liquids, P., 348.

Lubrzynska, (*Miss*) *Eva*, and *Ida* **Smedley**, condensation of aromatic aldehydes with pyruvic acid, P., 174.

M.

Macbeth, *Alexander Killen*, and *Alfred Walter* **Stewart**, the so-called disodium derivative of diethyl malonate, P., 11.

Macbeth, *Alexander Killen*. See also *Peter Joseph* **Brannigan**, *John Cannell* **Cain**, *Hans Thacher* **Clarke**, and *Ernest Magowan* **Harper**.

McCleland, *Nial Patrick*. See *John Edward* **Purvis**.

McCombie, *Hamilton*, and *Harold Archibald* **Scarborough**, the condensation of α-keto-β-anilino-α-phenylethane and its homologues with carbonyl chloride, phenylcarbimide, and phenylthiocarbimide, T., 56.

McCombie, *Hamilton*, and *Percy James* **Ward**, the action of chlorine on *m*-iodoaniline and on *m*-bromoaniline, T., 1995; P., 283.

McCombie, *Hamilton*. See also *Horace Leslie* **Crowther** and *George* **King**.

Macdonald, *James Leslie Auld*, the mechanism of the condensation of glucose with acetone, T., 1896; P., 260.

McKenzie, *Alexander*, and *Fred* **Barrow**, some derivatives of desylamine, T., 1331; P., 228.

McKenzie, *Alexander*, and *George William* **Clough**, experiments on the Walden inversion. Part IX. The interconversion of the optically active phenylmethylcarbinols, T., 687; P., 109.

McKenzie, *Alexander*, and *Geoffrey* **Martin**, optically active glycols derived from the phenyl-lactic acids. Part I., T., 112.

Mackenzie, *John Edwin*, cyaphenine, P., 175.

Macleod, *John*. See *Alexander Charles* **Cumming**.

Madsen, *Erik Höst*, reactions of halogen-substituted acids; effect of alkalis in methyl-alcoholic solution on bromoacetic, α-bromopropionic, and monobromosuccinic acids, T., 965; P., 129.

Mallet, *John William*, obituary notice of, T., 760.

Mann, (*Miss*) *Gladys Ruby*. See *John Theodore* **Hewitt**.

Marsh, *James Ernest*, and *William Claude* **Rhymes**, some double salts with acetone of crystallisation and the crystallisation of silver iodide, silver bromide, and cuprous iodide, T., 781; P., 62.

Marsh, *James Ernest*. See also *Thomas Vipond* **Barker**.

Marshall, *Arthur*, the vapour pressures of binary mixtures. Part II. The partial pressure of glyceryl trinitrate in solution in acetone, P., 157.

Marshall, *Hugh*, the interaction of iodine and thiocarbamide, P., 14.

the nomenclature of the rhamnose group and of other substances related to the aldehexoses, P., 54.

Martin, *Geoffrey*, dibenzyl- and diphenyl-silicols and -silicones, T., 119.

silicon compounds. Part I. Rational nomenclature of complex silicon compounds and silicates, both organic and inorganic, P., 190.

silicon compounds. Part II. Methylsilicoses derived from silicon hexachloride, P., 190.

Martin, *Geoffrey*. See also *Alexander* **McKenzie**.

Masson, *James Irvine Orme*, the occurrence of neon in vacuum-tubes containing hydrogen, P., 233.

Masters, (*Miss*) *Helen*, and *Henry Llewellyn* **Smith**, the behaviour of calcium and magnesium salts with soap solutions and the determination of hardness of water, T., 992; P., 76.

May, *Percy*, the tautomerism of thioanilides, T., 2272; P., 360.

Meldola, *Raphael*, and *John Theodore* **Hewitt**, the absorption spectra of some derivatives of the nitroaminophenols in relation to their constitution, T., 876; P., 160.

Meldola, *Raphael*, and *William Francis* **Hollely**, quinone-ammonium derivatives. Part II. Nitrohaloid, dihaloid, and azo-compounds, T., 177; P., 6.

Meldola, *Raphael*, and *Frédéric* **Reverdin**, the constitution of the trinitro-*p*-aminophenols and trinitro-*p*-anisidines, T., 1484; P., 248.

Merriman, *Richard William*, the vapour pressures of the lower alcohols and their azeotropic mixtures with water. Part I. Ethyl alcohol, T., 628; P., 68.

the mutual solubilities of ethyl acetate and water and the densities of mixtures of ethyl acetate and ethyl alcohol, T., 1774; P., 259.

the azeotropic mixtures of ethyl acetate, ethyl alcohol, and water at pressures above and below the atmospheric pressure. Parts I. and II., T., 1790, 1801; P., 259, 260.

coumaranone derivatives. Part II. The constitution of ethyl coumaranonecarboxylate, T., 1838; P., 257.

coumaranone derivatives. Part III. Acylazo-derivatives of coumaranonecarboxylic acid, T., 1845; P., 258.

some properties of carbon monoxide, P., 33.

Merton, *Thomas Ralph*, the photography of absorption spectra, T., 124.

the form of extinction curves: cobalt nitrate solutions, T., 249; P., 4.

the absorption of light by uranous chloride in different solvents, P., 284.

Micklethwait, (*Miss*) *Frances Mary Gore*. See *John Cannell* **Cain** and *Gilbert Thomas* **Morgan**.

Mills, (*Mrs.*) *Mildred*. See *William Hobson* **Mills**.

Mills, *William Hobson*, and (*Miss*) *Alice Mary* **Bain**, the configuration of the doubly-linked nitrogen atom; optically active salts of the semicarbazone and benzoylphenylhydrazone of *cyclo*hexanone-4-carboxylic acid, P., 309.

Mills, *William Hobson*, and (*Mrs.*) *Mildred* **Mills**, synthetical production of derivatives of dinaphthanthracene, P., 126.

Mitchell, *Alec Duncan*, and *Clarence* **Smith**, existence of racemic compounds in the liquid state, T., 489; P., 67.

Morgan, *Gilbert Thomas*, and (*Miss*) *Frances Mary Gore* **Micklethwait**, the constitution of the ortho-diazoimines. Part II. The *p*-tolyl-β-naphthatriazoles, T., 71.

Morgan, *Gilbert Thomas*, and (*Miss*) *Frances Mary Gore* **Micklethwait**, the constitution of the ortho-diazoimines. Part III. The α- and β-acyl-3:4-tolylenediazoimides as structural isomerides, T., 1391; P., 232.

Morgan, *Gilbert Thomas*, and *Henry Webster* **Moss**, co-ordination compounds of vanadium. Part I. The acylacetonates, T., 78.

researches on residual affinity and co-ordination. Part I. Metallic acetylacetonates and their absorption spectra, P., 371.

metallic derivatives of acetylacetone and acetyl mesityl oxide; preliminary note, P., 373.

Morgan, *Gilbert Thomas*, and *Joseph Allen* **Pickard**, influence of substitution on the reactivity of *p*-phenylenediamine, P., 229.

Morgan, *Gilbert Thomas*, and *Joseph* **Reilly**, non-aromatic diazonium salts. Part I. Antipyrinediazonium salts and their azo-derivatives, T., 808; P., 133.

non-aromatic diazonium salts. Part II. Azo-derivatives from antipyrinediazonium salts and their absorption spectra, T., 1494; P., 247.

non-aromatic diazonium salts. Part III. 3:5-Dimethylpyrazole-4-diazonium salts and their azo-derivatives, P., 379.

Morgan, *Gilbert Thomas*, and *Godfrey Edward* **Scharff**, constitution of the ortho-diazoimines. Part IV. Isomeric benzenesulphonyl-3:4-tolylenediazoimides, P., 374.

Morrell, *George Francis*, and *Peter* **Burgen**, the polymerisation of cyanamide, P., 300.

Mosenthal, *Henry de*, obituary notice of, T., 763.

Moss, *Henry Webster*. See *Gilbert Thomas* **Morgan**.

Mosscrop, *Thomas Duncan*. See *Samuel James Manson* **Auld**.

Mukerjee, *Kshitish Chandra*, and *Edwin Roy* **Watson**, some derivatives of phenanthraquinone; preliminary note, P., 268.

Mukherjea, *Haridas*. See *Rasik Lal* **Datta**.

Mumford, *Ernest Moore*, a new iron bacterium, T., 645; P., 79.

Mumford, *Ernest Moore*. See also *Gilbert John* **Fowler**.

Mussell, *Albert George*. See *Ferdinand Bernard* **Thole**.

Myers, *James Eckersley*. See *Alfred* **Holt**.

N.

Nair, *Theketh Kumaran*, and *Thomas* **Turner**, the influence of temperature and pressure on the volatility of zinc and cadmium, T., 1534; P., 151.

Naunton, *William Johnson Smith*. See *Frank* **Tutin**.

Neogi, *Pañchānan*, preparation of amine nitrites, P., 112.

Newlands, *Benjamin Edward Reina*, obituary notice of, T., 764.

Nolan, *Thomas Joseph*, and *Samuel* **Smiles**, the interaction of bromine and the sulphides of β-naphthol. Part II., T., 340; P., 53.

naphthathioxin and *iso*naphthathioxin, T., 901; P., 151.

β-naphthol sulphide and *iso*-β-naphthol sulphide; and the constitution of β-naphthol, P., 197.

P.

Parker, *Albert*, influence of increase of initial temperature on the explosiveness of gaseous mixtures, T., 934; P., 130.

Parker, *Albert*. See also *Colin* **Campbell**.

Parker, *Leslie Henry*, the action of variously treated waters on sodium amalgam, T., 2071; P., 299.

Parker, *Leslie Henry*. See also *Herbert Brereton* **Baker**.

Patterson, *Hubert Sutton*. See *John Norman* **Collie**.

Patterson, *Thomas Stewart*, an attempt to harmonise, qualitatively, the relation between temperature and rotation for light of all refrangibilities of certain active substances, both in the homogeneous state and in solution, T., 145.

Patterson, *Thomas Stewart*, and *William Collins* **Forsyth**, the influence of solvents on the rotation of optically active compounds. Part XIX. The rotation of certain derivatives of lactic acid, T., 2263; P., 284.

Patterson, *William Hamilton*, a constant pressure viscometer, P., 172.

Pattinson, *John*, obituary notice of, T., 765.

Peacock, *David Henry*, externally compensated hydroxyhydrazinohydrindene, its derivatives, and resolution into optically active components, T., 669; P., 109.

Peddle, *Cyril James*, and *William Ernest Stephen* **Turner**, solubilities of salts of ammonium bases in water and in chloroform. Part I. Solubility as a constitutive property, T., 1202; P., 119.

Perkin, *Arthur George,* quercetagetin, T., 209; P., 9.
gossypetin, T., 650; P., 110.
the methylation of quercetin, T., 1632; P., 253.
note on purpurogallin, P., 354.

Perkin, *William Henry, jun.,* and *Robert* **Robinson,** harmine and harmaline. Part II. The synthesis of *iso*harman, T., 1973; P., 290.

Perkin, *William Henry, jun.,* and *Jocelyn Field* **Thorpe,** note on the structure of certain lactones formed by the fission of the *gem.*-dimethyl-*cyclo*propane ring, T., 1760; P., 259.

Perkin, *William Henry, jun.* See also *Gibbs* **Blackstock,** *Julius* **Bredt,** *Robert George* **Fargher,** and *Walter Norman* **Haworth.**

Perkins, *William Hughes,* the porosity of iron, P., 302.

Perkins, *William Hughes,* and *Albert Theodore* **King,** the precipitation of lead thiosulphate and its behaviour on boiling with water, T., 300.

Philip, *James Charles,* the solubility of sulphanilic acid and its hydrates, T., 284; P., 28.

Philip, *James Charles,* and *Arthur* **Bramley,** the reaction between ferric salts and thiocyanates, T., 795; P., 123.

Pickard, *Joseph Allen.* See *Gilbert Thomas* **Morgan.**

Pickard, *Robert Howson,* and *Joseph* **Kenyon,** investigations on the dependence of rotatory power on chemical constitution. Part IV. The rotations of the normal secondary alcohols of the formula $C_2H_5{\cdot}CH(OH){\cdot}R$, T., 1923; P., 266.
investigations on the dependence of rotatory power on chemical constitution. Part V. The simpler esters of the carbinols, $CH_3{\cdot}CH(OH){\cdot}R$, P., 296.
co-ordination of rotatory powers for different wave-lengths, temperatures, and solutions; preliminary note, P., 296.

Pickard, *Robert Howson, William* **Lewcock,** and *Joseph* **Yates,** the alcohols of the hydroaromatic and terpene series, P., 127.

Pickard, *Robert Howson.* See also *Thomas Martin* **Lowry.**

Pickering, *Spencer Percival Umfreville,* note on cupric malate and citrate, T., 1354; P., 191.
organic ferric salts, T., 1354; P., 191.
the colour intensity of iron, P., 192.

Pickles, *Samuel Shrowder,* and *John Campbell* **Earl,** note on the oil of the fruits of *Alpinia alba,* Rosc., P., 164.

Pictet, *Amé.* See *Francis William* **Kay.**

Platt, *Claude Bernard.* See *Arthur Herbert* **Clark.**

Pollard, *Cornelius Theodore.* See *William Ernest Stephen* **Turner.**

Pope, *Frank George,* fluorone derivatives. Part II. Resorcinol-benzein, P., 378.

Pope, *Frank George,* and (*Miss*) *Winifred Isabel* **Willett,** colour and constitution of azomethine compounds. Part III., T., 1258; P., 191.

Pope, *Frank George.* See also *John Jacob* **Fox** and *John Theodore* **Hewitt.**

Pope, *William Jackson,* and *John* **Read,** a novel method for resolving externally compensated amines; derivatives of *d*- and *l*-oxymethylenecamphor, T., 444; P., 78.
the ten stereoisomeric tetrahydroquinaldinomethylenecamphors, T., 1515; P., 247.
the identity of the supposed β-2:5-dimethylpiperazine, P., 382.

Pope, *William Jackson,* and (*Miss*) *Clara Millicent* **Taylor,** the resolution of 2:3-diphenyl-2:3-dihydro-1:3:4-naphthaisotriazine into optically active components, T., 1763; P., 259.

Porter, *Thomas Cunningham,* the character and cause of the blue fluorescence which develops in alkaline solutions containing quinol and sulphite on exposure to the air, P., 4.

Powell, *Charles Wilfrid Roberts,* the viscosity of sugar solutions, P., 264.

Power, *Frederick Belding,* and *Arthur Henry* **Salway,** the constituents of the rhizome and roots of *Caulophyllum thalictroides,* T., 191, P., 2.
the identification of ipuranol and some allied compounds as phytosterol glucosides, T., 399; P., 63.
chemical examination of sarsaparilla root, P., 372.

Power, *Frederick Belding, Frank* **Tutin,** and *Harold* **Rogerson,** the constituents of hops, T., 1267; P., 180.

Powis, *Frank.* See *Harry Medforth* **Dawson.**

Pratt, *Walter Ryley.* See *Arthur William* **Crossley.**

Price, *Thomas Slater,* and *Sidney Albert* **Brazier,** complex metal ammonias; *cis*-sulphonyldiacetatodiethylenediaminecobaltic hydrogen sulphonyldiacetate, P., 272.

Procter, *Henry Richardson,* the equilibrium of dilute hydrochloric acid and gelatin, P., 370.

Purvis, *John Edward*, the absorption spectra of various derivatives of aniline, phenol, and benzaldehyde, T., 1638; P., 253.

the absorption spectra of various derivatives of pyridine, piperidine, and piperazine in solution and as vapours, T., 2283; P., 303.

Purvis, *John Edward*, and *Nial Patrick* **McCleland**, the absorption spectra of simple aliphatic substances in solutions and as vapours. Part II. Unsaturated aldehydes and ketones, T., 433; P., 26.

the absorption spectra of various derivatives of benzene, T., 1088; P., 132.

Pyman, *Frank Lee*, the constitution of the anhydro-bases derived from tetrahydroberberine alkyl hydroxides, T., 817; P., 125.

the application of Hofmann's reaction to dialkylacetamides, T., 832; P., 126.

Pyman, *Frank Lee*. See also *Francis Howard* **Carr** and *Hooper Albert Dickinson* **Jowett**.

R.

Rakshit, *Jitendra Nath*, preparation of secondary and tertiary acid amides from their metallic derivatives, T., 1557; P., 195.

Rakshit, *Jitendra Nath*. See also *Prafulla Chandra* **Rây**.

Ramsay, (*Sir*) *William*, the presence of helium in the gas from the interior of an *X*-ray bulb, T., 264; P., 21.

Rây, *Prafulla Chandra*, *Rajendralal* **De**, and *Nilratan* **Dhar**, equivalent conductivities of sodium hyponitrite, calcium hyponitrite, and hyponitrous acid, T., 1562; P., 185.

Rây, *Prafulla Chandra*, *Manik Lal* **Dey**, and *Sarat Chandra* **Jânâ**, guanidinium nitrite and its decomposition by heat, P., 283.

Rây, *Prafulla Chandra*, and *Nilratan* **Dhar**, chlorides of the mercurialkyl- and mercurialkylaryl-ammonium series and their constitution as based on conductivity measurements, T., 3.

equivalent conductivity and ionisation of nitrites, T., 10.

Rây, *Prafulla Chandra*, and *Sarat Chandra* **Jânâ**, the vapour density of ammonium nitrate, benzoate, and acetate, T., 1565; P., 234.

vapour density of ammonium nitrate; preliminary note, P., 28.

Rây, *Prafulla Chandra*, and *Jitendra Nath* **Rakshit**, nitrites of the alicylic ammonium series; nitrosopiperazinium nitrite, T., 1.

Read, *John*. See *William Jackson* **Pope**.

Reilly, *Joseph*. See *Gilbert Thomas* **Morgan**.

Remfry, *Frederick George Percy*, perezone, T., 1076; P., 72.

Renouf, (*Miss*) *Nora*. See *Arthur William* **Crossley**.

Report of the Council, T., 700; P., 81.

Report of the International Committee on atomic weights, 1914, T., 1742; P., 240.

Reverdin, *Frédéric*. See *Raphael* **Meldola**.

Rhead, *Thomas Fred Eric*, and *Richard Vernon* **Wheeler**, the mode of combustion of carbon, T., 461; P., 51.

the mode of combustion of carbon: the effect of drying the oxygen, T., 1210; P., 193.

Rhymes, *William Claude*. See *James Ernest* **Marsh**.

Rice, *Francis Owen*. See *Edward Charles Cyril* **Baly**.

Richardson, *Arthur*, obituary notice of, T., 766.

Rindl, *Max*, nitration of 1-chloro-2:4-dinitronaphthalene, T., 1911; P., 263.

Robertson, *Philip Wilfrid*, isomerism of *p*-azophenol, T., 1472; P., 221.

Robertson, *Philip Wilfrid*, and *Oscar Lisle* **Brady**, the azo-derivatives of 2:2′-diphenol, T., 1479; P., 248.

Robinson, *Gertrude Maud*, and *Robert* **Robinson**, the mechanism of the benzoin synthesis; preliminary note, P., 266.

Robinson, *Robert*. See *Robinson Percy* **Foulds**, *Edward* **Hope**, *William Henry* **Perkin**, *jun.*, and *Gertrude Maud* **Robinson**.

Robison, *Robert*, and *Frederic Stanley* **Kipping**, organic derivatives of silicon. Part XX. Some condensation products of dibenzylsilicanediol, P., 348.

Robison, *Robert*. See also *Frederic Stanley* **Kipping**.

Rogerson, *Harold*. See *Frederick Belding* **Power**.

Rowe, *Frederick Maurice*. See *Arthur George* **Green**.

Ruhemann, *Siegfried*, and *Stanley Isaac* **Levy**, studies on cyclic ketones. Part III., T., 551; P., 74.

Ruhemann, *Siegfried*. See also *Stanley Isaac* **Levy**.

Rule, *Alexander,* and *John Smeath* **Thomas,** the polysulphides of the alkali metals. Part I. The polysulphides of sodium, P., 380.

Rule, *Alexander.* See also *John Smeath* **Thomas.**

S.

Salway, *Arthur Henry,* researches on the constitution of physostigmine. Part II. The synthesis of 3-dimethylaminoacetyl-2-methylindole and 2-α-dimethylamino-γ-hydroxypropylindole, T., 351 ; P., 59.

the synthetical preparation of the *d*-glucosides of sitosterol, cholesterol, and some fatty alcohols, T., 1022 ; P., 170.

researches on the constitution of physostigmine. Part III. The formation of substituted indoles from *m*-4-xylidine, and the reduction of 3-nitro-*p*-tolylacrylic acid, T., 1988 ; P., 287.

Salway, *Arthur Henry.* See also *Frederick Belding* **Power.**

Scarborough, *Harold Archibald.* See *Hamilton* **McCombie.**

Scharff, *Godfrey Edward.* See *Gilbert Thomas* **Morgan.**

Scott, *Alexander,* the preparation of pure bromine, T., 847 ; P., 124.

Scott, *James Patterson.* See *James Colquhoun* **Irvine.**

Segaller, *David,* the relative activities of certain organic iodo-compounds with sodium phenoxide in alcoholic solution. Part I. Some normal primary alkyl iodides, T., 1154 ; P., 159.

the relative activities of certain organic iodo-compounds with sodium phenoxide in alcoholic solution. Part II. *iso-*, *sec.*-, and *tert.*-Alkyl iodides, T., 1421 ; P., 246.

the relative activities of certain organic iodo-compounds with sodium phenoxide in alcoholic solution. Part III. The temperature-coefficients, P., 305.

the relative activities of certain organic iodo-compounds with sodium phenoxide. Part IV. The influence of the solvent, P., 379.

Sen, *Kumud Behari.* See *Edwin Roy* **Watson.**

Sen-Gupta, *Hemendra Kumar,* condensation of ketones with phenols, P., 29.

oxidation of the anhydrides of 1:1-dihydroxydinaphthyldialkylmethanes ; preliminary note, P., 382.

Sen-Gupta, *Hemendra Kumar,* and *Biman Bihari* **Dey,** condensation of camphorquinone with phenols, P., 155.

Sen-Gupta, *Narendra Nath,* and *Edwin Roy* **Watson,** some derivatives of 2:3:4:2′-tetrahydroxybenzophenone ; preliminary note, P., 269.

Shah, *Popatlal Govindlal.* See *Bernard Mouat* **Jones.**

Shipsey, (*Miss*) *Kathleen,* and *Emil Alphonse* **Werner,** the purification of acetone by means of sodium iodide, T., 1255 ; P., 194.

sodium iodide with acetone of crystallisation, P., 117.

Sidgwick, *Nevil Vincent.* See *Bernard Howell* **Wilsdon.**

Simonsen, *John Lionel,* derivatives of *o*-xylene, T., 1144 ; P., 26, 126.

Simonsen, *John Lionel.* See also *John Cannell* **Cain.**

Singh, *Bawa Kartar,* studies in substituted quaternary azonium compounds containing an asymmetric nitrogen atom. Part I. Resolution of phenylmethylethylazonium iodide into optically active components, T., 604 ; P., 109.

Smedley, *Ida.* See (*Miss*) *Eva* **Lubrzynska.**

Smiles, *Samuel.* See *Thomas Joseph* **Nolan.**

Smith, *Clarence.* See *John Cannell* **Cain** and *Alec Duncan* **Mitchell.**

Smith, *Henry Edgar.* See *Edward Percy* **Frankland.**

Smith, *Henry Llewellyn.* See (*Miss*) *Helen* **Masters.**

Smith, *Sydney.* See *Arthur William* **Crossley.**

Smith, *Thomas Alfred,* and *Frederic Stanley* **Kipping,** a study of some organic derivatives of tin as regards their relation to the corresponding silicon compounds. Part II. Condensation products of dihydroxydibenzylstannane, T., 2034 ; P., 280.

Smyth, (*Miss*) *Wilhelmina Rebecca.* See *Holland* **Crompton.**

Stansfield, *John Firth.* See *Alfred Vincent* **Elsden.**

Starling, *Walter William.* See *George* **Barger.**

Stephen, *Henry,* and *Charles* **Weizmann,** αδ-derivatives of adipic and β-methyladipic acids, and the preparation of muconic and β-methylmuconic acids, T., 269 ; P., 14.

Stephen, *Henry.* See also *Charles* **Weizmann.**

Stewart, *Alfred Walter.* See *Peter Joseph* **Brannigan,** *John Cannell* **Cain,** *Hans Thacher* **Clarke,** and *Alexander Killen* **Macbeth.**

Still, *Charles James.* See *Henry* **Wren.**

Stubbs, *Clifford Morgan,* the action of sulphur dioxide on copper at high temperatures, T., 1445; P., 225.

T.

Taylor, (*Miss*) *Clara Millicent.* See *William Jackson* **Pope.**

Taylor, *Hugh Stott,* the action of halogens on silver salts, T., 31.

Taylor, *John.* See *Augustus Edward* **Dixon.**

Thole, *Ferdinand Bernard,* viscosity and association. Part III. The existence of racemic compounds in the liquid state, T., 19.

viscosity and association. Part IV. The viscosity of the aromatic amines, T., 317; P., 32.

Thole, *Ferdinand Bernard, Albert George* **Mussell,** and *Albert Ernest* **Dunstan,** viscosity maxima and their interpretation, T., 1108; P., 174.

Thole, *Ferdinand Bernard.* See also *Albert Ernest* **Dunstan.**

Thomas, *Ebenezer Rees,* the influence of the constitution of tertiary bases on the rate of formation of quaternary ammonium salts. Part I., T., 594; P., 32.

Thomas, *John Smeath,* and *Alexander* **Rule,** the conversion of sodium hydrosulphide into sodium monosulphide, T., 871; P., 154.

Thomas, *John Smeath.* See also *Alexander* **Rule.**

Thomson, *Robert Fraser.* See *James Colquhoun* **Irvine.**

Thorpe, *Jocelyn Field,* and *Arthur Samuel* **Wood,** the chemistry of the glutaconic acids. Part VII. The normal and labile forms of αγ-dimethylglutaconic acid and their reduction to *cis*-αγ-dimethylglutaric acid, T., 276; P., 5.

the chemistry of the glutaconic acids. Part VIII. β-Phenylglutaconic acid and the β-phenyl-α-methylglutaconic acids, T., 1569; P., 253.

the chemistry of the glutaconic acids. Part IX. A method for distinguishing between the esters of the normal and labile acids, T., 1579; P., 254.

the formation and reactions of iminocompounds. Part XVIII. The condensation of *cyclo*hexanones with cyanoacetamide involving the displacement of an alkyl group, T., 1586; P., 256.

Thorpe, *Jocelyn Field,* and *Arthur Samuel* **Wood,** the replacement of alkyl groups in tertiary aromatic bases, T., 1601; P., 257.

the chemistry of the glutaconic acids. Part X. The alkylation of the ethereal salts, T., 1752; P., 255.

Thorpe, *Jocelyn Field.* See also *Richard Moore* **Beesley** and *William Henry* **Perkin,** *jun.*

Tinkler, *Charles Kenneth,* the carbinol–ammonium base isomerism in connexion with azomethine bases. Part I. Derivatives of cinnamylidene-*p*-toluidine, T., 885; P., 114.

a series of mixtures of nitro-compounds and amines, which are coloured in the liquid state only, T., 2171; P., 278.

Titherley, *Arthur Walsh,* the constitution of allantoin, T., 1336; P., 109.

Titherley, *Arthur Walsh,* and *Gerald Eyre Kirkwood* **Branch,** hexahydropyrimidine and its benzoyl derivatives, T., 330; P., 29.

Titherley, *Arthur Walsh.* See also *Noel Guilbert Stevenson* **Coppin.**

Turner, *Thomas.* See *Theketh Kumaran* **Nair.**

Turner, *William Ernest Stephen,* and *Crellyn Colgrave* **Bissett,** the solubilities of alkali haloids in methyl, ethyl, propyl, and *iso*amyl alcohols, T., 1904; P., 263.

a simple and efficient method of dehydrating substances by electrical heating in a vacuum, P., 233.

Turner, *William Ernest Stephen,* and *Cornelius Theodore* **Pollard,** an improved apparatus for the determination of molecular weight by the Landsberger-Sakurai method, P., 349.

Turner, *William Ernest Stephen.* See also *Cyril James* **Peddle.**

Tutin, *Frank,* the constituents of senna leaves, T., 2006; P., 278.

the so-called calcium β-diglyceryl-phosphate; a correction, P., 228.

Tutin, *Frank,* and *Hubert William Bentley* **Clewer,** note on the constituents of commercial chrysarobin, P., 285.

Tutin, *Frank,* and *William Johnson Smith* **Naunton,** some derivatives of oleanol, T., 2050; P., 301.

Tutin, *Frank.* See also *Frederick Belding* **Power.**

Twiss, *Douglas Frank,* the action of hydrogen peroxide on the sodium alkyl thiosulphates, P., 356.

Tyrer, *Daniel*, adiabatic and isothermal compressibilities of some liquids between one and two atmospheres' pressure, T., 1675; P., 252.
Tyrer, *Daniel*. See also *James* **Fletcher.**

U.

Underhill, *Leo Kingsley*. See *David Leonard* **Chapman.**

V.

Vanstone, *Ernest*, the miscibility of solids. Part II. The influence of chemical constitution on the thermal properties of binary mixtures, T., 1826; P., 262.
Vlieland, *Charles Archibald*. See *Harold Brewer* **Hartley.**

W.

Wade, *John*, obituary notice of, T., 767.
Walker, *James*, van't Hoff memorial lecture, T., 1127; P., 179.
Wallace, *Thomas Arthur*. See *William Ringrose Gelston* **Atkins.**
Wallach, *Otto*. See *Walter Norman* **Haworth.**
Ward, *Percy James*. See *Hamilton* **McCombie.**
Warner, *Charles Horne*, oxidation of the nitro-*o*-xylenes with dilute nitric acid, P., 60.
Watson, *Edwin Roy*, the constituents of the oil of *Cydnus indicus*, T., 548; P., 28.
6′-aminoquercetin, P., 280.
a relation between chemical constitution and depth of colour of dyes, P., 348.
Watson, *Edwin Roy*, and *Kumud Behari* **Sen,** dyes derived from quercetin, P., 349.
Watson, *Edwin Roy*. See also *Kedar Nath* **Ghosh,** *Kshitish Chandra* **Mukerjee,** and *Narendra Nath* **Sen-Gupta.**
Weizmann, *Charles*, and *Henry* **Stephen,** the preparation of some organoselenium compounds; preliminary note, P., 196.
Weizmann, *Charles*, *Henry* **Stephen,** and *Ganesh Sakharam* **Agashe,** condensation of acid chlorides with the ethyl esters of (*a*) cyanoacetic acid, (*b*) malonic acid, and (*c*) acetoacetic acid. Part I., T., 1855; P., 261.
Weizmann, *Charles*. See also *Henry* **Stephan.**
Werner, *Emil Alphonse*, mechanism of the transformation of ammonium cyanate into carbamide, and of the decomposition of carbamide by heat; the polymerisation of cyanic acid, T., 1010; P., 132.
mechanism of the decomposition of carbamide and biuret by heat, and of the formation of ammelide, T., 2275; P., 287.
Werner, *Emil Alphonse*. See also (*Miss*) *May Emily* **Coade** and (*Miss*) *Kathleen* **Shipsey.**
Wheeler, *Richard Vernon*, the volatile constituents of coal. Part IV. The relative inflammabilities of coal dusts, T., 1715; P., 250.
Wheeler, *Richard Vernon*. See also *Maurice John* **Burgess,** *Arthur Herbert* **Clark,** *David Trevor* **Jones,** and *Thomas Fred Eric* **Rhead.**
Willett, (*Miss*) *Winifred Isabel*. See *Frank George* **Pope.**
Williams, *Herbert Ernest*, the carbonylferrocyanides, P., 10.
some blue cyanogen compounds, P., 32.
some green cyanogen compounds, P., 54.
Williams, *Thomas*. See *Alexander* **Findlay.**
Willsdon, *Francis George*. See *Francis Ernest* **Francis.**
Wilsdon, *Bernard Howell*, and *Nevil Vincent* **Sidgwick,** the rate of hydration of acid anhydrides: acetic, propionic, butyric, and benzoic, T., 1959; P., 265.
Wilson, *Forsyth James*, and *Isidor Morris* **Heilbron,** contributions to our knowledge of semicarbazones. Part II. Semicarbazones of mesityl oxide, T., 377; P., 59.
Wilson, *Forsyth James*. See also *Isidor Morris* **Heilbron.**
Witham, *Ernest*. See *James* **Kenner.**
Withers, *John Charles*. See *Martin Onslow* **Forster.**
Wood, *Arthur Samuel*. See *Jocelyn Field* **Thorpe.**
Woodhouse, (*Miss*) *Hilda*. See *William Smith* **Denham.**
Wootton, *William Ord*, obituary notice of, T., 774.
Worley, *Ralph Palliser*, the surface tension of mixtures. Part I. Mixtures of partly miscible liquids and the influence of solubility, P., 359.

Worley, *Ralph Palliser*, the surface tension of mixtures. Part II. Mixtures of perfectly miscible liquids and the relation between their surface tensions and vapour pressures, P., 360.

Wren, *Henry*, and *Charles James* **Still**, the action of magnesium aryl haloids on glyoxal, T., 1770; P., 262.

Wright, *Robert*, the relation between the absorption spectra of acids and their salts. Part I. Sodium salts, T., 528; P., 63.

Wright, *Robert*, measurement of the rate of reaction by the change of volume in solution, P., 280.

the absorption spectra of sulphurous acid and sulphites; preliminary note, P., 375.

Y.

Yates, *Joseph*. See *Robert Howson* **Pickard**.

INDEX OF SUBJECTS.

TRANSACTIONS AND PROCEEDINGS. 1913.

(Marked T. and P. respectively.)

Single organic compounds of known empirical formula will be found in the Formula Index, p. 2323.

A.

Acenaphthene, $C_{12}H_{10}$.

Acetone of crystallisation, double salts with (MARSH and RHYMES), T., 781; P., 62.

Acetylacetonates, metallic, absorption spectra of (MORGAN and MOSS), P., 371.

Acid anhydrides. See Anhydrides, acid.

Acid chlorides, condensation of, with the ethyl esters of acetoacetic acid, cyanoacetic acid, and malonic acid (WEIZMANN, STEPHEN, and AGASHE), T., 1855; P., 261.

Acids, relation between the absorption spectra of, and of their sodium salts (WRIGHT), T., 528; P., 63.

catalytic activity of (DAWSON and POWIS), T., 2135; P., 308.

carboxylic, preparation of secondary amines from (LE SUEUR), T., 1119; P., 189.

halogen-substituted, reactions of (MADSEN), T., 965; P., 129.

organic, action of sulphur chloride and of thionyl chloride on metallic salts of (DENHAM and WOODHOUSE), T., 1861; P., 261.

Aconitine, $C_{34}H_{47}O_{11}N$.

Acylacetonates of vanadium (MORGAN and MOSS), T., 78.

Address, presidential (FRANKLAND), T., 713; P., 93.

Affinity, residual, and co-ordination (MORGAN and MOSS), P., 371.

relation between chemical constitution and (CLARKE), T., 1689; P., 249.

Alcohols, lower, vapour pressure of, and of their azeotropic mixtures with water (MERRIMAN), T., 628; P., 68.

lower aliphatic, equilibrium of mixtures of water and (ATKINS and WALLACE), T., 1461; P., 194.

Alcohols, normal secondary, rotation of (PICKARD and KENYON), T., 1923; P., 266.

optically active, configurations of (CLOUGH), P., 357.

Aldehydes, aromatic, condensation of, with pyruvic acid (LUBRZYNSKA and SMEDLEY), P., 174.

unsaturated, absorption spectra of (PURVIS and MCCLELAND), T., 433; P., 26.

Alkali haloids, solubilities of, in alcohols (TURNER and BISSETT), T., 1904; P., 263.

iodides, double salts of silver iodide with (MARSH and RHYMES), T. 781; P., 62.

polysulphides (RULE and THOMAS), P., 380.

sulphides and quinol, cause of the blue fluorescence developing in solutions containing (PORTER), P., 4.

Alkaloids, absorption spectra and constitution of (DOBBIE and FOX), T., 1193; P., 180.

from ipecacuanha. See Ipecacuanha.

from *iso*quinoline. See *iso*Quinoline.

Alkyl groups, replacement of, in tertiary aromatic bases (THORPE and WOOD), T., 1601; P., 257.

iodides, relative activities of, with sodium phenoxide (SEGALLER), T., 1154, 1421; P., 159, 246, 305, 379.

sodium thiosulphates, action of hydrogen peroxide on (TWISS), P., 356.

Alkylamines, action of, on reducing sugars (IRVINE, THOMSON, and GARRETT), T., 238; P., 7.

Alkylammonium nitrites (RÂY and RAKSHIT), T., 1.

Allantoin, $C_4H_6O_3N_4$.

Alloys, fractionation of, in the electric micro-furnace (FLETCHER), T., 2097; P., 134.

Alpinia alba, constituents of the oil from the fruit of (PICKLES and EARL), P., 164.

Amides, acid, preparation of, from their metallic derivatives (RAKSHIT), T., 1537; P., 195.
Amines and nitro-compounds, mixtures of, which are only coloured in the liquid state (TINKLER), T., 2171; P., 278.
aromatic, viscosity of (THOLE), T., 317; P., 32.
externally compensated, resolution of (POPE and READ), T., 444; P., 78.
secondary, preparation of, from carboxylic acids (LE SUEUR), T., 1119; P., 189.
preparation of nitrites of (NEOGI), P., 112.
α-Amino-acids, conversion of, into α-ketonic aldehydes (DAKIN and DUDLEY), P., 192.
Ammelide, $C_3H_4O_2N_4$.
Ammonia, action of, on reducing sugars (IRVINE, THOMSON, and GARRETT), T., 238; P., 7.
Ammonium bases, solubility of salts of, in water and in chloroform (PEDDLE and TURNER), T., 1202; P., 119.
Ammonium salts, quaternary, influence of the constitution of tertiary bases on the rate of formation of (THOMAS), T., 594; P., 32.
Ammonium iodide, effect of heat on (HOLT and MEYERS), P., 61.
nitrate, vapour density of (RÂY and JÂNÂ), T., 1565; P., 26, 234.
Anhydrides, acid, preparation of (DENHAM and WOODHOUSE), T., 1861; P., 261.
rate of hydration of (WILSDON and SIDGWICK), T., 1959; P., 265.
Anilines, nitro-, quinonoid salts of (GREEN and ROWE), T., 508; P., 66.
Aniline-black, constitution of (GREEN and JOHNSON), P., 276.
Annual General Meeting, T., 700; P., 81.
Antipyrinediazonium salts, absorption spectra of azo-derivatives of (MORGAN and REILLY), T., 1494; P., 247.
Aromatic compounds, preparation of, from the hydroaromatic series (CROSSLEY and RENOUF), P., 369.
Association and viscosity (THOLE), T., 19, 317; P., 32.
influence of, on viscosity (BAKER), T., 1671.
Atomic weights, report of the International Committee on, T., 1743; P., 240.
table of, T., 1746; P., 243.
Atropine, $C_{17}H_{23}O_3N$.
Azo-compounds, hydroxy- (HEILBRON and HENDERSON), T., 1404; P., 226.
Azomethines, colour and constitution of (POPE and WILLETT), T., 1258; P., 191.
carbinol-ammonium base isomerism of (TINKLER), T., 885; P., 114.
Azonium compounds, quaternary substituted, containing an asymmetric nitrogen atom (SINGH), T., 604; P., 109.

B.

Bacillus, new, acting on iron solutions (MUMFORD), T., 645: P., 79.
Balance sheets of the Chemical Society and of the Research Fund. See Annual General Meeting, T., 700; P., 81.
Barium potassium carbonate (DATTA and MUKHERJEA), P., 186.
Bases, cyclic, formation of, from aromatic amides (HOPE and LANKSHEAR), P., 224.
tertiary, influence of the constitution of, on the rate of formation of quaternary ammonium salts (THOMAS), T., 594; P., 32.
aromatic, replacement of alkyl groups in (THORPE and WOOD), T., 1601; P., 257.
Beech wood, action of ozone on (DORÉE and CUNNINGHAM), T., 677; P., 104.
Benzerythrene, $C_{24}H_{18}$.
Benzoin synthesis, mechanism of the (G. M. and R. ROBINSON), P., 266.
Bismuth organic compounds (CHALLENGER), P., 76.
Bismuthinitrites (BALL and ABRAM), T., 2110; P., 150.
Biuret, $C_2H_5O_2N_3$.
Bleaching, dynamics of (HIGGINS), T., 1816; P., 258.
Bleaching action of hypochlorites (HIGGINS), P., 302.
Bornylene, $C_{10}H_{16}$.
Bromine, pure, preparation of (SCOTT), T., 847; P., 124.
Polybromides, colour and solubility of, in nitrobenzene solution (JOSEPH), T., 1554; P., 72.
Brucine, $C_{23}H_{26}O_4N_2$.

C.

Cadmium, volatility of (NAIR and TURNER), T., 1534; P., 151.
Cæsium platini-iodide (DATTA), T., 427; P., 79.
nitrite, preparation and properties of (BALL and ABRAM), T., 2130; P., 197.
Calcium salts, action of, on soap solutions (MASTERS and SMITH), T., 992; P., 76.

Calcium potassium carbonate (DATTA and MUKHERJEA), P., 187.
Calorimeter, adiabatic (GRAY), P., 376.
Camphane series, studies in the (FORSTER and HOWARD), T., 63; (FORSTER), T., 662; P., 104.
Canadine, $C_{20}H_{21}O_4N$.
Cantharene, C_8H_{12}.
Carbinols, preparations of esters of (PICKARD and KENYON), P., 296.
Carbon, combustion of (RHEAD and WHEELER), T., 461, 1210; P., 51, 193.
Carbon, new oxide of (JARRARD), P., 106.
*mon*oxide, properties of (MERRIMAN), P., 33.
*di*oxide, influence of colloids and of suspensions of charcoal on the evolution of (FINDLAY and KING), T., 1170; P., 173.
solubility of, in water (FINDLAY and WILLIAMS), T., 636; P., 115.
Carbonylferrocyanides (WILLIAMS), P., 10.
Catalytic activity of acids (DAWSON and POWIS), T., 2135; P., 308.
Caulophyllosapogenin, $C_{56}H_{88}O_9$.
Caulophyllosaponin, $C_{65}H_{104}O_{17}$.
Caulophyllum thalictroides, constituents of the rhizome and roots of (POWER and SALWAY), T., 191; P., 2.
Caulosapogenin, $C_{42}H_{66}O_6$.
Caulosaponin, $C_{51}H_{88}O_{17}$.
Celluloid, absorption of gases by (LEFEBURE), P., 368.
Cellulose, methylation of (DENHAM and WOODHOUSE), T., 1735; P., 251.
action of ozone on (DORÉE and CUNNINGHAM), T., 677, 1347; P., 104, 222.
nitrate, viscosity of solutions of (BAKER), T., 1653; P., 244.
Cephæline, $C_{28}H_{38}O_4N_2$.
Cerebrone, $C_{48}H_{93}O_9N$.
Chaulmoogric acid, $C_{18}H_{32}O_2$.
Chemical compounds containing labile hydrogen atoms, absorption spectra of (BRANNIGAN, MACBETH, and STEWART), T., 406; P., 58.
constitution and absorption spectra (MELDOLA and HEWITT), T., 876; P., 160.
and absorption spectra of alkaloïds (DOBBIE and FOX), T., 1193; P., 180.
relation between residual affinity and (CLARKE), T., 1689; P., 249.
and rotatory power (PICKARD and KENYON), T., 1923; P., 266.
and viscosity (DUNSTAN and THOLE), T., 127; (DUNSTAN, HILDITCH, and THOLE), T., 133; (DUNSTON, THOLE, and BENSON), P., 378.
Chemical constitution, influence of, on the thermal properties of binary mixtures (VANSTONE), T., 1826; P., 262.
reactivity and absorption spectra (BALY and RICE), T., 91, 2085; P. 216.
Chlorine, interaction of hydrogen and (CHAPMAN and UNDERHILL), T., 496; P., 75.
Hydrochloric acid, influence of water on the partial pressure of, above its alcoholic solutions (JONES, LAPWORTH, and LINGFORD), T., 252; P., 5.
Hypochlorites, bleaching action of (HIGGINS), P., 302.
Chrysarobin, commercial, constituents of (TUTIN and CLEWER), P., 285.
Coal, composition of (JONES and WHEELER), P., 376.
volatile constituents of (CLARK, WHEELER, and PLATT), T., 1704; P., 250; (WHEELER), T., 1715; P., 250.
vacuum distillation of (BURGESS and WHEELER), P., 376.
Cobalt nitrate, extinction curves in absorption spectra of solutions of (MERTON), T., 249; P., 4.
Cocaine, $C_{17}H_{21}O_4N$.
Colloids, influence of, on the solubility of gases in water (FINDLAY and WILLIAMS), T., 636; P., 115.
Colour of mixtures of nitro-compounds and amines (TINKLER), T., 2171; P., 278.
Colouring-matters, formation of, by quinonoid addition (GREEN), T., 925; P., 116.
relation between constitution and depth of colour of (WATSON), P., 348.
from quercetin (WATSON and SEN), P., 349.
See also Gossypetin, Gossypitone.
Conductivity water. See under Water.
Co-ordination and residual affinity (MORGAN and MOSS), P., 371.
Copper, action of sulphur dioxide on, at high temperatures (STUBBS), T., 1445; P., 225.
action of sulphuric acid on (CUNDALL), P., 344.
Cuprous iodide, crystallisation of (MARSH and RHYMES), T., 781; P., 62.
Cupric salts of organic acids (PICKERING), T., 1354; P., 191.
Copper, detection of, by guaiacum resin (ATKINS), P., 303.
Coumaranone derivatives (MERRIMAN), T., 1838, 1845; P., 257, 258.

Crystals, optical activity and enantiomorphism of (BARKER and MARSH), T., 837; P., 62.
Cyaphenine, $C_{21}H_{15}N_3$.
Cyclic compounds, formation of, from derivatives of 2:2′-dimethyldiphenyl (KENNER), T., 613; P., 105.
Cydnus indicus, constituents of the oil of (WATSON), T., 548; P., 28.
Cytisine, $C_{11}H_{14}ON_2$.
α-Cytisolidine, $C_{11}H_{15}N$.
β-Cytisolidine, $C_{11}H_{11}N$.

D.

Dehydration by electrical heating (TURNER and BISSETT), P., 233.
Denitrification and enzyme action (HULME), P., 117.
mechanism of (HULME), P., 307.
Dialkylacetamides, application of Hofmann's reaction to (PYMAN), T., 852; P., 126.
Diazo-compounds, aliphatic, constitution of (FORSTER and CARDWELL), T., 861; P., 150.
***o*-Diazoimines**, constitution of (MORGAN and MICKLETHWAIT), T., 71, 1391; P., 232; (MORGAN and SCHARFF), P., 374.
Diazonium salts, non-aromatic (MORGAN and REILLY), T., 808, 1494; P., 133, 247, 379.
Dibenzyl-silicols and **-silicones** (MARTIN), T., 119.
Dihydroresorcins, substituted (GILLING), T., 2029; P., 286.
Dinaphthanthracene derivatives, preparation of (W. H. and M. MILLS), P., 123.
Dioxime peroxides. See *iso*Oxadiazole oxides.
Diphenyl series, studies in the (CAIN, MACBETH, and STEWART), T., 586; P., 77; (CAIN, COULTHARD, and MICKLETHWAIT), T., 2074; P., 289.
Diphenyl-silicols and **-silicones** (MARTIN), T., 119.
Dispersion, rotatory, of organic compounds (LOWRY), T., 1322; P., 221; (LOWRY, PICKARD, and KENYON), P., 348.
measurement of (LOWRY), T., 1062; P., 171; (LOWRY and DICKSON), T., 1067; P., 171.
anomalous (LOWRY and DICKSON), P., 185.
Dynamic isomerism. See Isomerism.

E.

Electric micro-furnace, fractionation of alloys and minerals in the (FLETCHER), T., 2097; P., 134.
Electrical conductivity of solutions, determination of (HARTLEY and BARRETT), T., 786; P., 132.
Electrical heating in a vacuum (TURNER and BISSETT), P., 233.
Elements of varying valency, colour reactions of compounds of, with tetranitromethane (CLARKE, MACBETH, and STEWART), P., 161.
Enantiomorphism and optical activity of molecular and crystal structure (BARKER and MARSH), T., 837; P., 62.
Enzyme action and denitrification (HULME), P., 117.
Epiborneol, $C_{10}H_{18}O$.
Epicamphor, $C_{10}H_{16}O$.
Eserine, $C_{15}H_{21}O_2N_3$.

F.

Ferric salts. See under Iron.
Ferrocyanides, complex blue (WILLIAMS), P., 32.
Fluorescence, theory of (BALY), P., 201.
Fluorone derivatives (POPE), P., 378.
Furoxans. See *iso*Oxadiazole oxides.

G.

Gases, rate of evolution of, from supersaturated solutions (FINDLAY and KING), T., 1170; P., 173.
influence of colloids on the solubility of, in water (FINDLAY and WILLIAMS), T., 636; P., 115.
absorption of, by celluloid (LEFEBURE), P., 368.
influence of increase of initial temperature on the explosiveness of mixtures of (PARKER), T., 984; P., 130.
Gelatin, $C_{35}H_{57}O_{13}N_{11}$.
Glass, permeability of, to halogen vapours (FIRTH), P., 111.
Glucoses, methylated (IRVINE and SCOTT), T., 564, 575; P., 70, 71.
Glucosides. See Caulophyllosaponin, Caulosaponin, and Kaempferin.
Glucosides, amino-, synthetic (IRVINE and HYND), T., 41.
Glutaconic acids, chemistry of (THORPE and WOOD), T., 276, 1569, 1579, 1752; P., 5, 253, 254, 255.
Glycols, optically active (MCKENZIE and MARTIN), T., 112.
Gossypetin, $C_{14}H_{10}O_8$.
Gossypetonic acid, $C_{14}H_{18}O_6$.
Gossypitone, $C_{15}H_8O_5$.
Guaiacum resin, detection of oxydases and of copper by (ATKINS), P., 303.

H.

Halogens, permeability of glass to the vapours of (FIRTH), P., 111.
action of, on silver salts (TAYLOR), T., 31.
Harmaline, $C_{13}H_{14}ON_2$.
*iso***Harman**, $C_{12}H_{10}N_2$.
Harmine, $C_{13}H_{12}ON_2$.
Heat, latent, of vapours (APPLEBEY and CHAPMAN), P., 24.
Helium, presence of, in the gas from the interior of an X-ray bulb (RAMSAY), T., 264; P., 21.
Hofmann's reaction, application of, to dialkylacetamides (PYMAN), T., 852; P., 126.
Homochelidonine, $C_{21}H_{23}O_5N$.
Hops, constituents of (POWER, TUTIN, and ROGERSON), T., 1267; P., 180.
nitrogenous constituents of (CHAPMAN), P., 182.
Humulol, $C_{17}H_{18}O_4$.
Hydrochloric acid. See under Chlorine.
Hydrogen, presence of neon in, after passage of the electric discharge (COLLIE and PATTERSON), T., 419; P., 22, 79, 217; (MASSON), P., 233.
interaction of chlorine and (CHAPMAN and UNDERHILL), T., 496; P., 75.
Hydrogen *per*oxide, catalytic decomposition of (DYER and DALE), P., 55; (BASSETT), P., 56.
action of, on sodium alkyl thiosulphates (TWISS), P., 356.
α-Hydroxy-acids, interconversion of α-ketonic aldehydes and (DAKIN and DUDLEY), P., 156.
Hydroxyl ions, method for determination of the concentration of (FRANCIS and GEAKE), T., 1722; P., 249.
Hyoscine, $C_{17}H_{21}O_4N$.
Hyoscyamine, $C_{17}H_{23}O_3N$.
Hypochlorites. See under Chlorine.
Hyponitrous acid. See under Nitrogen.

I.

Imines, aromatic, formation of cyclic bases from (HOPE and LANKSHEAR), P., 224.
Imino-compounds, formation and reactions of (THORPE and WOOD), T., 1586; P., 256.
Iodine, action of, with thiocarbamide (MARSHALL), P., 14.
blue adsorption compounds of (BARGER and STARLING), P., 128.
Iodo-compounds, organic, relative activities of, with sodium phenoxide (SEGALLER), T., 1154, 1421; P., 159, 246, 305, 379.
Ionic reactions, influence of acetylacetone on (HEWITT and MANN), P., 30.
Ionisation and the law of mass action (BOUSFIELD), T., 307; P., 8, 371.
Ipecacuanha, alkaloids from (CARR and PYMAN), P., 226.
Ipuranol, $C_{29}H_{50}O_5$.
Iron, porosity of (PERKINS), P., 302.
Iron salts, colour intensity of solutions of (PICKERING), P., 192.
Ferric salts, the reaction between thiocyanates and (PHILIP and BRAMLEY), T., 795; P., 123.
reaction between thiosulphates and (HEWITT and MANN), T., 324; P., 30.
of organic acids (PICKERING), T., 1358; P., 191.
Ferric ferroferricyanides, complex green (WILLIAMS), P., 54.
Iron solutions, bacillus acting on (MUMFORD), T., 645; P., 79.
Isomerism, dynamic (LOWRY and GLOVER), T., 913; (LOWRY and COURTMAN), T., 1214; P., 168.

K.

Kæmpferin, $C_{27}H_{30}O_{16}$.
Kairoline, $C_{10}H_{13}N$.
Ketones, relation between the absorption spectra and constitution of (G. G. and J. A. R. HENDERSON and HEILBRON), P., 354.
mechanism of α-bromination of (LAPWORTH), P., 289.
condensation of, with phenols (SEN-GUPTA), P., 29.
aliphatic, absorption spectra of (DAWSON), T., 1308; P., 130.
cyclic, studies on (RUHEMANN and LEVY), T., 551; P., 74.
unsaturated, absorption spectra of (PURVIS and MCCLELAND), T., 433; P., 26.
α-Ketonic aldehydes, formation of, from α-amino-acids (DAKIN and DUDLEY), P., 192.
interconversion of α-hydroxy-acids and (DAKIN and DUDLEY), P., 156.

L.

Lactones from ethyl dicarbethoxydimethyl*cyclo*propanemalonate (PERKIN and THORPE), T., 1760; P., 259.
Lead potassium carbonate (DATTA and MUKHERJEA), P., 187.
thiosulphate, precipitation of, and its behaviour on boiling with water (PERKINS and KING), T., 300.
cyanide (GUPTA), P., 361.

Lead, estimation of small quantities of (ELSDEN and STANSFIELD), T., 1039; P., 173.
Light, influence of, on isomerism (LOWRY and COURTMAN), T., 1214; P., 168.
Liquids, miscibility of (HOLMES), T., 2147; P., 362.
adiabatic and isothermal compressibilities of (TYRER), T., 1675; P., 252.
mixed, molecular constitution of (ATKINS and WALLACE), T., 1461; P., 194.
surface tension of (WORLEY), P., 359, 360.
optically active, rotatory dispersion of (LOWRY, PICKARD, and KENYON), P., 348.
organic, magnetic rotation and dispersion of (LOWRY), P., 221.
Lithium nitrite, preparation and properties of (BALL and ABRAM), T., 2130; P., 197.

M.

Magnesium salts, action of, on soap solutions (MASTERS and SMITH), T., 992; P., 76.
Magnesium aryl haloids, action of, on glyoxal (WREN and STILL), T., 1770; P., 262.
Magnetic rotatory dispersion, measurement of (LOWRY), T., 1322; P., 221.
Manganomanganic ferrocyanide (WILLIAMS), P., 32.
Manna, new variety of (FURLONG and CAMPBELL), P., 128.
Mass action, law of, and ionisation (BOUSFIELD), T., 307; P., 3, 371.
Memorial lecture, Ladenburg (KIPPING), T., 1871; P., 273.
Van't Hoff (WALKER), T., 1127.
Mercury alloys with silver and tin (KNIGHT and JOYNER), T., 2247; P., 282.
with sodium, action of water on (BAKER and PARKER), T., 2060; P., 298; (PARKER), T., 2071; P., 299.
Mercuric chloride, reduction of, by sodium formate (FINDLAY and DAVIES), T., 1550; P., 250.
Mercuri-alkyl- and **-alkylaryl-ammonium** chlorides (RÂY and DHAR), T., 3.
Mercury, estimation of, as metal, in the dry way (CUMMING and MACLEOD), T., 513; P., 77.
Metal ammonias, complex (PRICE and BRAZIER), P., 272.
Metallic haloids, change of colour of solutions of (GARRETT), T., 1433; P., 225.
bismuthinitrites (BALL and ABRAM), T., 2110; P., 150.
Metaphosphoric acid. See under Phosphorus.
Methyl ketones, action of nitrogen iodide on (CHATTAWAY and BAXTER), T., 1906; P., 284.
Methyl pentoses, constitution of (GILMOUR), P., 363.
Methylsilicoses (MARTIN), P., 190.
Methyl tetritol (GILMOUR), P., 363.
Minerals, fractionation of, in the electric micro-furnace (FLETCHER), T., 2097; P., 134.
Mixtures, surface tension of (WORLEY), P., 359, 360.
binary, vapour pressure of (MARSHALL), P., 157.
influence of constitution on the thermal properties of (VANSTONE), T., 1826; P., 262.
Molecular structure, optical activity and enantiomorphism of (BARKER and MARSH), T., 837; P., 62.

N.

Naphthathioxin and *iso***Naphthathioxin**, $C_{20}H_{12}OS$.
Neon, presence of, in hydrogen after passage of the electric discharge (COLLIE and PATTERSON), T., 419; P., 22, 79, 217; (MASSON), P., 233.
Nicotine, $C_{10}H_{14}N_2$.
Nitric oxide. See Nitrogen *di*oxide.
o-**Nitrosamines**, conversion of, into *iso*-oxadiazole oxides (furoxans) (GREEN and ROWE), T., 2023; P., 275.
Nitro-compounds and amines, mixtures of, which are only coloured in the liquid state (TINKLER), T., 2171; P., 278.
Nitrogen iodide, action of, on methyl ketones (CHATTAWAY and BAXTER), T., 1986; P., 284.
*di*oxide (*nitric oxide*), action of, on a neutral solution of potassium permanganate (DUTT, CHATTERJI, and BANERJI), P., 235.
Nitrous acid, action of thiocarbamide with (COADE and WERNER), T., 1221; P., 188.
Nitrites, equivalent conductivity and ionisation of (RÂY and DHAR), T., 10.
estimation of, with thiocarbamide (COADE and WERNER), T., 1221; P., 188.

Nitrogen:—
Hyponitrous acid and its calcium and sodium salts, equivalent conductivities of (RÂY, DE, and DHAR), T., 1562; P., 185.
Nitrogen atom, doubly-linked, configuration of (MILLS and BAIN), P., 309.
Nor*iso*harman, $C_{11}H_8N_2$.

O.

Obituary notices:—
Paul Émile (dit Francois) Lecoq de Boisbaudran, T., 742.
Edward Divers, T., 746.
Humphrey Owen Jones, T., 755.
John William Mallet, T., 760.
Henry de Mosenthal, T., 763.
Benjamin Edward Reina Newlands, T., 764.
John Pattinson, T., 765.
Arthur Richardson, T., 766.
John Wade, T., 767.
William Ord Wootton, T., 774.
Oleanone, $C_{29}H_{46}O_4$.
Oncoba echinata, constituents of the fat of the seeds of (GOULDING and AKERS), P., 197.
Optical activity and enantiomorphism of molecular and crystal structure (BARKER and MARSH), T., 837; P., 62.
inversion, Walden's (FRANKLAND), T., 713; P., 93.
experiments on (MCKENZIE and CLOUGH), T., 687; P., 109.
model to illustrate (GARNER), P., 198.
Optically active compounds, relation between temperature and rotation of (PATTERSON), T., 145.
influence of solvents on the rotation of (PATTERSON and FORSYTH), T., 2263; P., 284.
Organic compounds, rotatory dispersion of (LOWRY), T., 1062, 1322; P., 171, 221; (LOWRY and DICKSON), T., 1067; P., 171.
*iso*Oxadiazole oxides (*furoxans; dioxime peroxides*), constitution of (GREEN and ROWE), T., 897; P., 152; (FORSTER and BARKER), T., 1918; P., 152.
conversion of *o*-nitroamines into (GREEN and ROWE), T., 2023; P., 275.
Oximes, isomerism of (BRADY and DUNN), T., 1613, 1619; P., 248.
Oxonium salt, resolution of an (LEVY, HOLMYARD, and RUHEMANN), P., 159.
Oxydases, detection of, by guaiacum resin (ATKINS), P., 303.
Ozone, action of, on cellulose (DORÉE and CUNNINGHAM), T., 677; P., 104; (DORÉE), T., 1347; P., 222.

P.

Perezone, $C_{15}H_{20}O_3$.
Phenols, condensation of, with acetonedicarboxylic acid (DEY), P., 154.
condensation of, with camphorquinone (SEN-GUPTA and DEY), P., 155.
condensation of ketones with (SEN-GUPTA), P., 29.
Phenols, iodo-, chlorination of (KING and MCCOMBIE), T., 220; P., 8.
nitro-, structure of the salts of (HEWITT, JOHNSON, and POPE), T., 1626; P., 251.
nitroamino-, absorption spectra and constitution of, and their derivatives (MELDOLA and HEWITT), T., 876; P., 160.
Phenolphthalein, $C_{20}H_{14}O_4$.
Phosphonium iodide, effect of heat on (HOLT and MYERS), P., 61.
Phosphorus:—
Metaphosphoric acid and its alkali salts (HOLT and MEYER), T., 532; P., 61.
Phytic acid (CLARKE), P., 27.
Phytin (CLARKE), P., 27.
Phytosterol glucosides, preparation of (SALWAY), T., 1022; P., 170.
ipuranol and allied compounds as (POWER and SALWAY), T., 399; P., 63.
Phytosterolins (POWER and SALWAY), T., 406; P., 64.
Piperine, $C_{17}H_{19}O_3N$.
Pipitzol, $C_{15}H_{20}O_3$.
Polybromides. See under Bromine.
Polypeptides, synthesis of (HOPWOOD), P., 345.
Potassium bromide, chloride, and iodide, spontaneous crystallisation of solutions of (JONES and SHAH), T., 1043; P., 160.
carbonate, double salts of, with carbonates of the alkaline earth metals and lead (DATTA and MUKHERJEA), P., 185.
permanganate, action of nitric oxide on a neutral solution of (DUTT, CHATTERJI, and BANERJI), P., 235.
Proline, $C_5H_9O_2N$.
Proteins, measurement of the tryptic hydrolysis of, by means of the tyrosine liberated (AULD and MOSSCROP), T., 281; P., 14.
*iso*Pulegol, preparation of, and its derivatives (PICKARD, LEWCOCK, and YATES), P., 127.

Purpurogallin (PERKIN), P., 354.
Pyrone derivatives, adsorption of iodine by (BARGER and STARLING), P., 128.

Q.

Quercetagetin, $C_{15}H_{10}O_8$.
Quercetaginic acid (PERKIN), T., 217; P., 9.
Quercetin, $C_{15}H_{10}O_7$.
*iso***Quinoline alkaloids** (HOPE and ROBINSON), T., 361; P., 63.
Quinone-ammonium derivatives (MELDOLA and HOLLELY), T., 177; P., 6.
p-**Quinones**, action of semicarbazide hydrochloride on (HEILBRON and HENDERSON), T., 1404; P., 226.

R.

Racemic compounds, existence of, in the liquid state (THOLE), T., 19; (MITCHELL and SMITH), T., 489; P., 67.
Radioactive disintegration products, chemical nature of (FLECK), T., 381, 1052; P., 7, 172.
Rays, Röntgen, presence of helium in the gas from the interior of a bulb containing (RAMSAY), T., 264; P., 21.
Resorcinol-benzein, $C_{19}H_{12}O_3$.
Rhamnose group, nomenclature of the (MARSHALL), P., 54.
Ring compounds, new series of (BEESLEY and THORPE), P., 346.
Rotation of optically active compounds, influence of solvents on the (PATTERSON and FORSYTH), T., 2263; P., 284.
relation between temperature and (PATTERSON), T., 145.
Rotatory power and chemical constitution (PICKARD and KENYON), T., 1923; P., 266, 296.
co-ordination of, for different wavelengths temperatures and solutions (PICKARD and KENYON), P., 296.
Rubidium platini-iodide (DATTA), T., 427; P., 79.
nitrite (BALL and ABRAM), T., 2130; P., 197.
Rubremetine, $C_{29}H_{32}O_4N_2$.

S.

Salts, double, with acetone of crystallisation (MARSH and RHYMES), T., 781; P., 62.
Sarsaparilla root, constituents of (POWER and SALWAY), P., 372.
Sarsapic acid, $C_6H_4O_6$.
Schiff's bases, addition of negative radicles to (JAMES and JUDD), P., 196.
Selenium organic compounds (WEIZMANN and STEPHEN), P., 197.
Semicarbazones (WILSON and HEILBRON), T., 377; P., 59; (HEILBRON and WILSON), T., 1504; P., 245.
Senna leaves, constituents of (TUTIN), T., 2006; P., 278.
Silicon compounds (MARTIN), P., 190.
Silicon organic compounds (ROBISON and KIPPING), P., 348; (KIPPING and ROBISON), P., 374.
Silicoses (MARTIN), P., 190.
Silver alloys with mercury and tin (KNIGHT and JOYNER), T., 2247; P., 282.
Silver salts, action of halogens on (TAYLOR), T., 31.
Silver bromide, crystallisation of (MARSH and RHYMES), T., 781; P., 62.
iodide, crystalline, and its double salts with alkali iodides (MARSH and RHYMES), T., 781; P., 62.
Soap, behaviour of calcium and magnesium salts with solutions of (MASTERS and SMITH), T., 992; P., 76.
Sodium alloys with mercury, action of water on (BAKER and PARKER), T., 2060; P., 298; (PARKER), T., 2071; P., 299.
Sodium iodide, crystallisation of, with acetone (SHIPSEY and WERNER), P., 117.
action of, on acetone (SHIPSEY and WERNER), T., 1255; P., 194.
*mono*sulphide, preparation of, from the corresponding hydrosulphide (THOMAS and RULE), T., 871; P., 154.
polysulphides (RULE and THOMAS), P., 380.
hydrosulphide, conversion of, into the monosulphide (THOMAS and RULE), T., 871; P., 154.
alkyl thiosulphates, action of hydrogen peroxide on (TWISS), P., 356.
Solids, miscibility of (VANSTONE), T., 1826; P., 262.
Solubility as a constitutive property (PEDDLE and TURNER), T., 1202; P., 119.
Solutions, theory of (HOLMES), T., 2147; P., 362.
determination of the electrical conductivity of (HARTLEY and BARRETT), T., 786; P., 132.
Solvents, influence of, on the rotation of optically active compounds (PATTERSON and FORSYTH), T., 2263; P., 284.

Spectra, absorption, in relation to constitution (MELDOLA and HEWITT), T., 876; P., 160.
and chemical reactivity (BALY and RICE), T., 91, 2085; P., 216.
photography of (MERTON), T., 124.
relation between the, of acids and of their sodium salts (WRIGHT), T., 528; P., 63.
of derivatives of aniline, phenol, and benzaldehyde (PURVIS), T., 1638; P., 253.
of chemical compounds containing labile hydrogen atoms (BRANNIGAN, MACBETH, and STEWART), T., 406; P., 58.
of unsaturated aldehydes and ketones (PURVIS and MCCLELAND), T., 433; P., 26.
and constitution of alkaloids (DOBBIE and FOX), T., 1193; P., 180.
of benzene derivatives (PURVIS and MCCLELAND), T., 1088; P., 132.
of ketones (G. G. and J. A. R. HENDERSON and HEILBRON), P., 354.
of aliphatic ketones (DAWSON), T., 1308; P., 130.
of thio-derivatives of benzene (FOX and POPE), T., 1263; P., 194.
Sphingosine, $C_{17}H_{35}O_2N$.
Strontium potassium carbonate (DATTA and MUKHERJEA), P., 187.
Sugars and their derivatives, nomenclature of (IRVINE), P., 69.
viscosity of solutions of (POWELL), P., 264.
reducing, action of ammonia and alkylamines on (IRVINE, THOMSON, and GARRETT), T., 238; P., 7.
Sulphur chloride, action of, on metallic salts of organic acids (DENHAM and WOODHOUSE), T., 1861; P., 261.
Thionyl chloride, action of, on metallic salts of organic acids (DENHAM and WOODHOUSE), T., 1861; P., 261.
Sulphur *di*oxide, action of, on copper at high temperatures (STUBBS), T., 1445; P., 225.
Sulphuric acid, action of, on copper (CUNDALL), P., 344.
Sulphurous acid, absorption spectra of, and of its salts (WRIGHT), P., 375.
Thiosulphates, reaction between ferric salts and (HEWITT and MANN), T., 324; P., 80.
Sulphuric acid. See under Sulphur.
Surface tension of mixtures (WORLEY), P., 359, 360.
Sylvestrene, $C_{10}H_{16}$.

T.

Tautomerism, keto-enolic, and absorption spectra (DAWSON), T., 1308; P., 130.
Temperature, relation between rotation of optically active compounds and (PATTERSON), T., 145.
Terpenes, chemistry of the (HENDERSON and CAW), T., 1543; P., 246.
Tetrahydro-oxazoles, formation of (CROWTHER and MCCOMBIE), T., 27.
Thallous nitrite (BALL and ABRAM), T., 2130; P., 197.
Thioanilides, tautomerism of (MAY), T., 2272; P., 360.
Thiocyanates, the reaction between ferric salts and (PHILIP and BRAMLEY), T., 795; P., 123.
Thionyl chloride. See under Sulphur.
Thiosulphates. See under Sulphur.
Thorium, relation of uranous salts to (FLECK), P., 383.
Tin, action of tartaric acid on, in presence of oxygen (CHAPMAN), T., 775; P., 122.
Tin alloys with mercury and silver (KNIGHT and JOYNER), T., 2247; P., 282.
Tin organic compounds in relation to the corresponding silicon compounds (SMITH and KIPPING), T., 2084; P., 280.

U.

Uranous salts, relation of, to thorium (FLECK), P., 383.
Uranous chloride, absorption of light by (MERTON), P., 284.

V.

Vanadium organic compounds (MORGAN and MOSS), T., 85.
Vapours, latent heat of (APPLEBEY and CHAPMAN), P., 24.
Vapour pressure of binary mixtures (MARSHALL), P., 157.
of lower alcohols, and of their azeotropic mixtures with water (MERRIMAN), T., 628; P., 68.
Velocity of evolution of gases from supersaturated solutions (FINDLAY and KING), T., 1170; P., 173.
Velocity of hydration of acid anhydrides (WILSDON and SIDGWICK), T., 1959; P., 265.
Velocity of reaction, measurement of, by the change of volume in solution (WRIGHT), P., 280.
Viscometer, constant pressure (PATTERSON), P., 172.

Viscosity (BINGHAM), T., 959; P., 113.
and association (THOLE), T., 19, 317; P., 32.
and chemical constitution (DUNSTAN and THOLE), T., 127; (DUNSTAN, HILDITCH, and THOLE), T., 133; (DUNSTAN, THOLE, and BENSON), P., 378.
influence of association on (BAKER), T., 1671.
maximum points on curves of (THOLE, MUSSELL, and DUNSTAN), T., 1108; P., 174.
determination of (APPLEBEY), T., 2167; P., 361.

W.

Walden inversion (FRANKLAND), T., 713; P., 93.
experiments on the (MCKENZIE and CLOUGH), T., 687; P., 109.
model to illustrate the (GARNER), P., 198.
Water, action of, on sodium amalgam (BAKER and PARKER), T., 2060; P., 298.
effect of metals and of radium bromide on the activity of, towards sodium amalgam (PARKER), T., 2071; P., 299.
Water:—
Conductivity water, preparation of (BOURDILLON), T., 791; P., 124.
Water, estimation of the hardness of (MASTERS and SMITH), T., 992; P., 76.
Weights, molecular, apparatus for determination of, by the Landsberger-Sakurai method (TURNER and POLLARD), P., 349.

X.

X-rays. See Rays, Röntgen.
Xanthohumol, $C_{13}H_{14}O_3$.
Xanthoxylum brachyacanthum, alkaloids of (JOWETT and PYMAN), T., 290; P., 26.
o-**Xylenes**, nitro-, oxidation of (WARNER), P., 60.
Xylenols, bromo- (CROSSLEY and RENOUF), P., 369.

Z.

Zinc, volatility of (NAIR and TURNER), T., 1534; P., 151.
estimation of (FINLAY and CUMMING), T., 1004; P., 153.

FORMULA INDEX.

THE following index of organic compounds of known empirical formula is arranged according to Richter's system (see *Lexikon der Kohlenstoff-Verbindungen*).

The elements are given in the order C, H, O, N, Cl, Br, I, F, S, P, and the remainder alphabetically.

The compounds are arranged—

Firstly, in groups according to the number of carbon atoms (thus C_1 group, C_2 group, etc.).

Secondly, according to the number of other elements besides carbon contained in the molecule (thus 5 IV indicates that the molecule contains five carbon atoms and four other elements).

Thirdly, according to the nature of the elements present in the molecule (given in the above order).

Fourthly, according to the number of atoms of each single element (except carbon) present in the molecule.

Salts are placed with the compounds from which they are derived. The chlorides, bromides, iodides, and cyanides of quaternary ammonium bases, however, are registered as group-substances.

C_1 Group.

CH_4 Methane, preparation and analysis of (CAMPBELL and PARKER), T., 1292; P., 130.

CO Carbon monoxide, properties of (MERRIMAN), P., 33.

CO_2 Carbon dioxide, solubility of, in water (FINDLAY and WILLIAMS), T., 636; P., 115; influence of colloids and of suspensions of charcoal on the evolution of (FINDLAY and KING), T., 1170; P., 173.

CN Cyanogen, constitution of (DIXON and TAYLOR), T., 974; P., 113.

1 II

CHN Hydrocyanic acid, lead salt (GUPTA), P., 361.

$CHCl_3$ Chloroform, latent heats of, and benzene, and of their mixtures (FLETCHER and TYRER), T., 517.

CHI_3 Iodoform, preparation of (CHATTAWAY and BAXTER), T., 1987.

CH_2O_2 Formic acid, preparation of (CHATTAWAY), P., 383; sodium salt, reduction of mercuric chloride by (FINDLAY and DAVIES), T., 1550; P., 250.

CH_2N_2 Cyanamide, polymerisation of (MORRELL and BURGEN), P., 300.

CH_4O Methyl alcohol, solubility of alkali haloids in (TURNER and BISSETT), T., 1904; P., 263.

CH_5N Methylamine, platini-iodide of (DATTA), T., 427; P., 79.

CH_5N_3 Guanidine, nitrite of, and its decomposition by heat (RÂY, DEY, and JÂNÂ), P., 283; thiocyanate of, formation of, from ammonium thiocyanate (KRALL), T., 1378; P., 189.

CO_8N_4 Tetranitromethane, colour reactions of, with various substances (HARPER and MACBETH), P., 304; colour reactions of, with compounds containing elements of varying valency (CLARKE, MACBETH, and STEWART), P., 161.

CNBr Cyanogen bromide, reactions of (DIXON and TAYLOR), T., 974; P., 113.

1 III

CHON Cyanic acid, polymerisation of (WERNER), T., 1010; P., 132; ammonium salt, transformation of, into carbamide (WERNER), T., 1010; P., 132.

CHNS Thiocyanic acid, ammonium salt, formation of guanidine thiocyanate from (KRALL), T., 1378; P., 189.

CH_4ON_2 Carbamide, transformation of ammonium cyanate into, and its decomposition by heat (WERNER), T., 1010; P., 132; decomposition of (BURROWS and FAWSITT), P., 264; decomposition of, by heat (WERNER), T., 2275; P., 287; condensation of chloral hydrate and (COPPIN and TITHERLEY), P., 352.

CH_4N_2S Thiocarbamide, action of, with iodine (MARSHALL), P., 14; action of nitrous acid with (COADE and WERNER), T., 1221; P., 188.

CH_5ON_3 Semicarbazide, action of the hydrochloride of, on *p*-quinones (HEILBRON and HENDERSON), T., 1404; P., 226.

C_2 Group.

$C_2H_2O_2$ Glyoxal, action of magnesium aryl haloids on (WREN and STILL), T., 1770; P., 262.

$C_2H_2O_4$ Oxalic acid, interaction of, with glycerol (CHATTAWAY), P., 383; neutral and acid potassium salts of (HARTLEY, DRUGMAN, VLIELAND, and BOURDILLON), 1747; P., 252.

$C_2H_4O_2$ Acetic acid, ammonium salt, vapour density of (RÂY and JÂNÂ), T., 1565; P., 234.

C_2H_5N Ethylamine, platini-iodide of (DATTA), T., 428; P., 79.

C_2H_6O Ethyl alcohol, densities of mixtures of ethyl acetate and (MERRIMAN), T., 1774; P., 259; azeotropic mixtures of ethyl acetate, water, and (MERRIMAN), T., 1790, 1801; P., 259, 260; vapour pressure of, and of its azeotropic mixtures with water (MERRIMAN), T., 628; P., 68; equilibrium of, with xylene and water (HOLT and BELL), P., 383; solubility of alkali haloids in (TURNER and BISSETT), T., 1904; P., 263.

C_2H_7N Dimethylamine, platini-iodide of (DATTA), T., 428; P., 79.

2 III

$C_2H_3O_2Cl_3$ Chloral hydrate, condensation of carbamide with (COPPIN and TITHERLEY), P., 352.

$C_2H_3O_2Br$ Bromoacetic acid, action of alkalis in methyl-alcoholic solution on (MADSEN), T., 965; P., 129.

$C_2H_5O_2N_3$ Biuret, action of heat on (WERNER), T., 2275; P., 287.

2 IV

$C_2H_2O_2NK$ Potassium diformamide (RAKSHIT), T., 1559; P., 195.

$C_2H_2O_2NNa$ Sodium diformamide (RAKSHIT), T., 1557; P., 195.

C_2H_4ONK Potassium acetamide (RAKSHIT), T., 1560; P., 195.

C_3 Group.

$C_3H_4O_3$ Pyruvic acid, condensation of aromatic aldehydes with (LUBRZYNSKA and SMEDLEY), P., 174.

$C_3H_5O_5$ Acid, from phytin (CLARKE), P., 27.

C_3H_6O Allyl alcohol, preparation of (CHATTAWAY), P., 383.

Acetone, purification of, with sodium iodide (SHIPSEY and WERNER), T., 1255; P., 194; crystallisation of sodium iodide with (SHIPSEY and WERNER), P., 117; condensation of, with glucose (MACDONALD), T., 1896; P., 260.

$C_3H_6N_6$ *iso*Melamine (KRALL), P., 377.

C_3H_7N Allylamine, platini-iodide of (DATTA), T., 428; P., 79; allyl oxamate, hydrogen oxalate and oxalate of (GLUUD), T., 945.

C_3H_8O Propyl alcohol, solubility of alkali haloids in (TURNER and BISSETT), T., 1904; P., 263.

$C_3H_8O_3$ Glycerol, interaction of, with oxalic acid (CHATTAWAY), P., 383.

C_3H_9N Trimethylamine, platini-iodide of (DATTA), T., 429; P., 79.

3 III

$C_3H_4O_2N_4$ Ammelide, preparation of (WERNER), T., 2275; P., 287.

$C_3H_5O_2Br$ α-Bromopropionic acid, action of alkalis in methyl-alcoholic solution on (MADSEN), T., 965; P., 129.

$C_3H_5O_9N_3$ Glyceryl trinitrate, partial pressure of, in acetone solution (MARSHALL), P., 157.

3 IV

$C_3H_3ON_2Cl_3$ β-Trichloroethylidenecarbamide (COPPIN and TITHERLEY), P., 353.

$C_3H_5O_2N_2Cl_3$ β-Trichloro-α-hydroxyethylcarbamide (COPPIN and TITHERLEY), P., 352.

C_3H_6ONK Potassium propionamide (RAKSHIT), T., 1560.

C_4 Group.

$C_4H_4O_4$ Malic anhydride (DENHAM and WOODHOUSE), T., 1870; P., 262.

$C_4H_6O_3$ Acetic anhydride, rate of hydration of (WILSDON and SIDGWICK), T., 1959; P., 265.

$C_4H_6O_4$ Succinic acid, optical rotatory power of derivatives of (CLOUGH), P., 352.

$C_4H_6O_5$ Glycollic anhydride (DENHAM and WOODHOUSE), T., 1869.

Malic acid, cupric salt (PICKERING), T., 1354; P., 191; ferric salt (PICKERING), T., 1361; P., 191.

$C_4H_6O_6$ Tartaric acid, rotation of, and of its derivatives (CLOUGH), P., 352; action of, on tin, in presence of oxygen (CHAPMAN), T., 775; P., 122; ferric salt (PICKERING), T., 1362; P., 191.

$C_4H_8O_2$ Ethyl acetate, azeotropic mixtures of ethyl alcohol, water, and (MERRIMANN), T., 1790, 1801; P., 259, 260; mutual solubilities of water and, and the densities of its mixtures with ethyl alcohol (MERRIMAN), T., 1774; P., 259.

$C_4H_8O_3$ Methyl *l*-lactate, rotation of (PATTERSON and FORSYTH), T., 2266.

$C_4H_8Br_2$ αγ-Dibromobutane, action of, on the sodium derivative of diethyl malonate (BLACKSTOCK and PERKIN), P., 74; action of, on the sodium derivatives of ethyl acetoacetate and benzoylacetate (FARGHER and PERKIN), P., 72.

$C_4H_{10}O$ Methylethylcarbinol, resolution of, and its salts (PICKARD and KENYON), T., 1941.

$C_4H_{10}N_2$ Hexahydropyrimidine or methylene-αγ-diaminopropane, and its salts (TITHERLEY and BRANCH), T., 334; P., 29.

Piperazine, absorption spectra of (PURVIS), T., 2286.

$C_4H_{11}N$ Diethylamine, platini-iodide of (DATTA), T., 428; P., 79.

4 III

$C_4H_5O_4Br$ Bromosuccinic acid, action of alkalis in methyl-alcoholic solution on (MADSEN), T., 965; P., 129.

$C_4H_6O_3N_4$ Allantoin, constitution of (TITHERLEY), T., 1336; P., 109.

$C_4H_6O_7S$ Thionyl derivative of glycollic acid (DENHAM and WOODHOUSE), T. 1869.

C_4H_7ON Allylformamide, preparation of (GLUUD), T., 941.

$C_4H_9ON_3$ Nitrosopiperazine, nitrite of (RÂY and RAKSHIT), T., 1.

$C_4H_{13}ON$ Tetramethylammonium hydroxide, platini-iodide of (DATTA), T. 429; P., 79.

4 IV

$C_4H_4O_4Cl_2S_2$ Anhydride, from sulphur chloride and silver monochloroacetate (DENHAM and WOODHOUSE), T., 1866.

C_5 Group.

C_5H_5N Pyridine, cupri- and platini-iodides of (DATTA), T., 429; P., 79.

$C_5H_6O_5$ Acetonedicarboxylic acid, condensation of, with phenols (DEY), P., 154.

$C_5H_7N_5$ 4-Triazo-3-5-dimethylpyrazole (MORGAN and REILLY), P., 379.

$C_5H_8O_2$ Acetylacetone, influence of, on ionic reactions (HEWITT and MANN), P., 30; cæsium, lithium, and scandium salts (MORGAN and MOSS), P., 373.

$C_5H_9N_3$ 4-Amino-3:5-dimethylpyrazole, salts of (MORGAN and REILLY), P., 379.

$C_5H_{10}O_3$ Methyl *l*-α-methoxypropionate, rotation of (PATTERSON and FORSYTH), T., 2268.

$C_5H_{10}O_4$ Methyl tetrose (GILMOUR), P., 108, 363.

$C_5H_{10}O_5$ Methyl tetronic acid, brucine salt of (GILMOUR), P., 363.

$C_5H_{10}Br_2$ αε-Dibromopentane (CLARKE), T., 1703.

$C_5H_{11}N$ Piperidine, absorption spectra of (PURVIS), T., 2285.

$C_5H_{11}Cl$ *d*-Amyl chloride (MCKENZIE and CLOUGH), T., 699.

$C_5H_{12}O$ *iso*Amyl alcohol, solubility of alkali haloids in (TURNER and BISSETT), T., 1904; P., 263.

C_5NCl_5 Pentachloropyridine, absorption spectra of (PURVIS), T., 2291.

5 III

C_5HNCl_4 2:3:4:5-Tetrachloropyridine, absorption spectra of (PURVIS), T., 2291.

$C_5H_2NCl_3$ Trichloropyridines, absorption spectra of (PURVIS), T., 2289.

$C_5H_2N_2Cl_4$ Tetrachloro-2-aminopyridine, absorption spectra of (PURVIS), T., 2291.

$C_5H_3NCl_2$ 3:5-Dichloropyridine, absorption spectra of (PURVIS), T., 2288.

$C_5H_7O_2N$ Ethyl cyanoacetate, condensation of, with acid chlorides (WEIZMANN, STEPHEN, and AGASHE), T., 1855; P., 261.

$C_5H_7O_3N$ Allyloxamic acid, and its salts (GLUUD), T., 943.

$C_5H_9O_2N$ Proline, detection of (GLUUD), P., 177.

Allylglycine, copper salt (GLUUD), P., 177.

$C_5H_9O_3N$ γ-Oximino-α-ethoxyacetone (WEIZMANN, STEPHEN, and AGASHE), T., 1857.

$C_5H_{10}O_2N$ Nitrosopiperidine, absorption spectra of (PURVIS), T., 2285.

5 IV

$C_5H_6O_3N_2Cl_6$ Di-(β-trichloro-α-hydroxyethyl)carbamide (COPPIN and TITHERLEY), P., 352.

$C_5H_{11}O_2ClS$ *d*-Amyl chlorosulphinate (MCKENZIE and CLOUGH), T., 698.

C_6 Group.

C_6H_6 Benzene, absorption spectra of derivatives of (PURVIS and MCCLELAND), T., 1088; P., 132; absorption spectra of derivatives of, containing sulphur (FOX and POPE), T., 1263; P., 194; and chloroform, latent heats of, and of their mixtures (FLETCHER and TYRER), T., 517.

6 II

$C_6H_4O_2$ Quinol, cause of the blue fluorescence developing in solutions containing alkali sulphites and (PORTER), P., 4.

$C_6H_4O_6$ Sarsapic acid (Power and Salway), P., 372.

C_6H_6O Phenol, absorption spectra of derivatives of (Purvis), T., 1638 ; P., 253 ; oxidation of, by bacteria (Fowler and Mumford), P., 156.

$C_6H_6N_2$ Phenyldi-imine, nature of Vaubel's supposed (Forster and Withers), T., 266 ; P., 24.

C_6H_7N Aniline, absorption spectra of derivatives of (Purvis), T., 1638 ; P., 253 ; platini-iodide of (Datta), T., 428 ; P., 79.

$C_6H_8O_7$ Citric acid, cupric salt (Pickering), T., 1354 ; P., 191 ; ferric salt (Pickering), T., 1362 ; P., 191.

$C_6H_8N_2$ *p*-Phenylenediamine, influence of substitution on the reactivity of (Morgan and Pickard), P., 229.

$C_6H_9O_4$ Methyl-*l*-α-acetoxypropionate rotation of (Patterson and Forsyth), T., 2267.

$C_6H_{10}O_2$ 1-Methyl *cyclo*butane-2-carboxylic acid (Blackstock and Perkin), P., 74.

$C_6H_{10}O_3$ Ethyl acetoacetate, condensation of, with acid chlorides (Weizmann, Stephen, and Agashe), T., 1855 ; P., 261.

Propionic anhydride, rate of hydration of (Wilsdon and Sidgwick), T., 1959; P., 265.

$C_6H_{10}O_4$ Ethylene glycol diacetate, hydrolysis of (Bainbridge), P., 4.

$C_6H_{12}O_6$ Dextrose, condensation of, with acetone (Macdonald), T., 1896 ; P., 260.

d-Mannose, formation of, from *d*-glucosamine (Irvine and Hynd), P., 306.

$C_6H_{12}O_7$ Gluconic acid, ammonium salt (Irvine, Thomson, and Garrett), T., 245 ; P., 7.

$C_6H_{14}O$ Ethyl-*n*-propylcarbinol, resolution of, and its salts (Pickard and Kenyon), T., 1942.

$C_6H_{14}O_6$ Dulcitol, melting point of (Furlong and Campbell), P., 128.

$C_6H_{14}N_2$ 2- and 3-Dimethylpiperazines, absorption spectra of (Purvis), T., 2287.

cis-2:6-Dimethylpiperazine (Pope and Read), P., 382.

$C_6H_{15}N$ Triethylamine platini-iodide (Datta), T., 429 ; P., 79.

Dimethylbutylamine and its picrate (Clarke), T., 1696.

6 III

C_6HNCl_6 2:3:4-Hexachloropicoline, absorption spectra of (Purvis), T., 2292.

$C_6H_2O_6N_4$ 4:6-Dinitrobenz*iso*oxadiazole oxide (Green and Rowe), T., 2029 ; P., 276.

$C_6H_3O_4N_3$ 6-Nitrobenz*iso*oxadiazole oxide (Green and Rowe), T., 2028 ; P., 276.

$C_6H_3O_6N_3$ Trinitrobenzene, absorption spectra of (Baly and Rice), T., 2085 ; P., 216.

$C_6H_3O_7N_3$ Picric acid, absorption spectra of (Baly and Rice), T., 2085 ; P., 216.

$C_6H_4O_6N_4$ 2:4:6-Trinitroaniline (*picramide*), potassium salt (Green and Rowe), T., 513.

$C_6H_4O_7N_4$ Trinitro-*p*-aminophenols, constitution of (Meldola and Reverdin), T., 1484 ; P., 248.

C_6H_5ONa Sodium phenoxide, relative activities of alkyl iodides with (Segaller), T., 1154, 1421 ; P., 159, 246, 305, 379.

$C_6H_5O_3N$ Nitrobenzene, solubility of polybromides in (Joseph), T., 1554 ; P., 72.

$C_6H_5O_4N_3$ 2:4-Dinitroaniline, potassium salt of (Green and Rowe), T., 513.

$C_6H_6O_2N_2$ *o*- and *p*-Nitroanilines, sodium salts of (Green and Rowe), T., 511.

C_6H_6NI *m*-Iodoaniline, hydrochloride of (McCombie and Ward), T., 1999
p-Iodoaniline, preparation of derivatives of (Chattaway and Constable), P., 304.
$C_6H_9O_3Na$ Ethyl sodioacetoacetate, action of αγ-dibromobutane on (Fargher and Perkin), P., 72.
$C_6H_9O_4N$ Fructoseazine (Irvine, Thomson, and Garrett), T., 247.
$C_6H_{12}O_4N_2$ αδ-Diaminoadipic acid, and its copper salt (Stephen and Weizmann), T., 274.
$C_6H_{13}OBr$ Methyl ε-bromoamyl ether (Clarke), T., 1703.
$C_6H_{13}O_5N$ *d*-Glucosamine, conversion of, into *d*-mannose (Irvine and Hynd), P., 306.
$C_6H_{13}ON$ Methyl γ-dimethylaminopropyl ether, and its picrate (Clarke), T., 1702.
$C_6H_{15}O_6P$ β-Diglycerylphosphoric acid, calcium salt, true nature of the so-called (Tutin), P., 228.
$C_6O_2Cl_3I$ 2:3:6-Trichloro-5-iodo-*p*-benzoquinone (McCombie and Ward), T., 2003.

6 IV

C_6HOCl_4Br 2:3:4:6-Tetrachloro-5-bromophenol (McCombie and Ward), T., 2005.
C_6HOCl_4I 2:3:4:6-Tetrachloro-5-iodophenol (McCombie and Ward), T., 2004.
C_6HOCl_6Br 2:2:3:4:4:6-Hexachloro-5-bromo-Δ^5-*cyclo*hexenone (McCombie and Ward), T., 2004.
C_6HOCl_6I 2:2:3:4:4:6-Hexachloro-5-iodo-Δ^5-*cyclo*hexenone (McCombie and Ward), T., 2002; P., 283.
$C_6H_2OCl_3Br$ 2:4:6-Trichloro-3-bromophenol (McCombie and Ward), T. 2005.
$C_6H_2OCl_3I$ 2:4:6-Trichloro-3-iodophenol (McCombie and Ward), T., 2003.
$C_6H_2ON_2Cl$ Chlorobenz*iso*oxadiazole (*chlorobenzfurazan*) (Green and Rowe) T., 900.
$C_6H_3ON_2Cl_3$ 2:3:4-Trichloropicolinamide, absorption spectra of (Purvis), T., 2292.
$C_6H_3ON_2Br$ 4-Bromobenz*iso*oxadiazole (Forster and Barker), T., 1923.
$C_6H_3OCII_2$ 6-Chloro-2:4-di-iodophenol (King and McCombie), T., 229; P., 8.
$C_6H_3OBr_2I$ 2:6-Dibromo-4-iodophenol (King and McCombie), T., 227; P., 8.
$C_6H_3O_2N_2Cl$ Chlorobenz*iso*oxadiazole oxide (*chlorobenzfurazan*) (Green and Rowe), T., 899.
$C_6H_3O_2N_2Br$ 4-Bromobenz*iso*oxadiazole oxide (Forster and Barker), T., 1921.
$C_6H_3O_3N_4Br$ 4- and 5-Bromo-2-nitrophenylazoimides (Forster and Barker), T., 1920.
$C_6H_3NCl_3I$ 2:4:6-Trichloro-3-iodoaniline (McCombie and Ward), T., 2000; P., 283.
C_6H_4OBrI 2-Bromo-4-iodophenol (King and McCombie). T., 231; P., 8.
$C_6H_5O_2N_2Cl$ Chloro-*o*-benzoquinonedioxime (Green and Rowe), T., 900.
$C_6H_5O_3N_2Br$ Bromonitro-*p*-aminophenol (Meldola and Hollely), T., 183.
$C_6H_7O_3NS$ Aniline-*p*-sulphonic acid (*sulphanilic acid*), and its hydrates, solubility of (Philip), T., 284; P., 28.
$C_6H_{10}O_2NNa$ Sodium dipropionamide (Rakshit), T., 1560.
$C_6H_{12}ONBr$ α-Ethylbutyrobromoamide (Pyman), T., 858.

6 V

$C_6H_3OClBrI$ 6-Chloro-2-bromo-4-iodophenol (King and McCombie), T., 232; P., 8.

$C_6H_3OCl_2Br_2I$ 2:6-Dibromo-4-iodophenol dichloride (KING and MCCOMBIE), T., 227; P., 8.

C_7 Group.

C_7H_6O Benzaldehyde, absorption spectra of derivatives of (PURVIS), T., 1638; P., 253.

$C_7H_6O_2$ Benzoic acid, ammonium salt, vapour density of (RÂY and JÂNÂ), T., 1565; P., 234.

$C_7H_8O_4$ β-Methylmuconic acid (STEPHEN and WEIZMANN), T., 276; P., 14.

$C_7H_{10}O_2$ 1-Methyldihydroresorcin, and its silver salt (GILLING), T., 2032; P., 286.

$C_7H_{10}O_3$ *cyclo*Hexanone-4-carboxylic acid, and the optically active salts of its derivatives (MILLS and BAIN), P., 309.

$C_7H_{10}O_4$ αγ-Dimethylglutaconic acid, labile (THORPE and WOOD), T., 279; P., 5.

1-Methyl*cyclo*butane-2:2-dicarboxylic acid (BLACKSTOCK and PERKIN), P., 74.

$C_7H_{10}O_6$ *iso*Butane-αγγ′-tricarboxylic acid (THORPE and WOOD), T., 1581; P., 255.

$C_7H_{12}O_2$ Heptane-βζ-dione (FARGHER and PERKIN), P., 73.

$C_7H_{12}O_4$ Diethyl malonate, condensation of, with acid chlorides (WEIZMANN, STEPHEN, and AGASHE), T., 1855; P., 261; sodium derivatives of, and their absorption spectra (MACBETH and STEWART), P., 11.

αβ-Dimethoxyvalerolactone (GILMOUR), P., 363.

$C_7H_{12}O_5$ Substance, from methylation of cellulose (DENHAM and WOODHOUSE), T., 1739; P., 251.

$C_7H_{14}O$ 2:6-Dimethyl-2:3:5:6-tetrahydro-1:4-pyran (FARGHER and PERKIN) P., 73.

$C_7H_{14}O_2$ Heptan-ζ-ol-β-one (FARGHER and PERKIN), P., 73.

$C_7H_{14}O_6$ Monomethyl glucoses (IRVINE and SCOTT), T., 571; P., 70.

$C_7H_{14}Br_2$ βζ-Dibromoheptane (FARGHER and PERKIN), P., 73.

$C_7H_{16}O$ Ethyl-*m*-butylcarbinol, resolution of, and its salts (PICKARD and KENYON), T., 1943.

$C_7H_{17}N$ δ-Aminoheptane, platinichloride of (PYMAN), T., 859.

Dimethyl-*n*- and -*iso*-amylamines, and their picrates (CLARKE), T., 1697.

7 III

$C_7H_3OCl_5$ 2:4:4:5-Pentachloro-3-methyl-$\Delta^{2:5}$-*cyclo*hexadienone (CROWTHER and MCCOMBIE), T., 547; P., 69.

$C_7H_3O_2Cl_3$ 2:4:5-Trichlorotoluquinone, preparation of (CROWTHER and MCCOMBIE), T., 548; P., 69.

$C_7H_4OCl_4$ 2:4:5:6-Tetrachloro-*m*-cresol (CROWTHER and MCCOMBIE), T., 546; P., 69.

$C_7H_5OCl_3$ 2:4:6-Trichloro-*m*-cresol (CROWTHER and MCCOMBIE), T., 545; P., 69.

$C_7H_5O_2Cl$ *m*-Chlorobenzoic acid, preparation of, and its hydroxylamine salt (GLUUD and KEMPF), T., 1530; P., 244.

$C_7H_5O_7N_3$ Trinitroanisole, absorption spectra of (BALY and RICE), T., 2085; P., 216.

$C_7H_6O_2N_2$ 5-Methylbenz*iso*oxadiazole oxide (*tolufurazan oxide*, *tolufuroxan*, *dinitrosotoluene*, *o-toluquinonedioximeperoxide*), preparation of (GREEN and ROWE), T., 898.

$C_7H_6O_2N_4$ Nitrotriazotoluenes (FORSTER and BARKER), T., 1921.

$C_7H_6O_3N_2$ *o*-, *m*-, and *p*-Nitrobenzaldoximes, *syn*- and *anti*-forms of (BRADY and DUNN), T., 1619; P., 248.

$C_7H_6O_6N_2$ 4:6-Dinitroguaiacol, and its barium salt (MELDOLA and REVERDIN), T., 1488.

$C_7H_6O_7N_4$ Trinitro-*p*-anisidines, constitution of (MELDOLA and REVERDIN), T., 1484; P., 248.

$C_7H_7O_2N_3$ 4-Hydroxybenzeneazoformamide, and its salts (HEILBRON and HENDERSON), T., 1414.

$C_7H_8O_2N_2$ *m*-Nitro-*p*-toluidine, sodium salt (GREEN and ROWE), T., 512.

$C_7H_8O_5N_4$ 3:5-Dinitro-2:4-diaminoanisole (MELDOLA and REVERDIN), T., 1490.

$C_7H_9O_2N_3$ 4-Nitro-2:5-tolylenediamine (MORGAN and MICKLETHWAIT), T., 1378.

$C_7H_{10}O_4Br_2$ $\alpha\delta$-Dibromo-β-methyladipic acid (STEPHEN and WEIZMANN), T., 272.

$C_7H_{11}O_3N$ Ethyl allyloxamate (GLUUD), T., 943.

$C_7H_{11}O_4Na$ Diethyl sodiomalonate, action of $\alpha\gamma$-dibromobutane on (BLACKSTOCK and PERKIN), P., 74.

$C_7H_{13}ON$ ϵ-Methoxyhexonitrile (CLARKE), T., 1704.

$C_7H_{13}ON_3$ α- and β-Semicarbazones of mesityl oxide (WILSON and HEILBRON), T., 377; P., 59.

$C_7H_{13}OBr$ ζ-Bromoheptan-β-one (FARGHER and PERKIN), P., 73.

$C_7H_{17}ON$ Methyl δ-dimethylaminobutyl ether, and its picrate (CLARKE), T., 1702.

Methyl ζ-aminohexyl ether (CLARKE), T., 1704.

7 IV

$C_7H_4O_2NCl_3$ Methyl 2:3:4-trichloropicolinate, absorption spectra of (PURVIS), T., 2291.

$C_7H_5O_2N_3Cl_2$ 3:5-Dichloro-4-hydroxybenzeneazoformamide (HEILBRON and HENDERSON), T., 1417.

$C_7H_6O_2N_3Cl$ 3-Chloro-4-hydroxybenzeneazoformamide, and its sodium salt (HEILBRON and HENDERSON), T., 1416.

$C_7H_9O_3NS$ Methylaniline-ω-sulphonic acid, sodium salt (POPE and WILLETT), T., 1259.

C_8 Group.

C_8H_{10} *o*-Xylene, derivatives of (CROSSLEY and PRATT), T., 982; P., 169; (CROSSLEY and SMITH), T., 989; P., 170; (SIMONSEN), T., 1144; P., 26, 126; (CROSSLEY and BARTLETT), T., 1297; P., 217; (CROSSLEY), T., 2179; P., 352.

m-Xylene, equilibrium of, with ethyl alcohol and water (HOLT and BELL), P., 383.

C_8H_{12} 1:2-Dimethyl-$\Delta^{2:6}$-*cyclo*hexadiene (HAWORTH), T., 1246; P., 193.

1:3-Dimethyl-$\Delta^{1:3}$-*cyclo*hexadiene (HAWORTH), T., 1248.

Cantharene, and allied hydrocarbons (HAWORTH), T., 1242; P., 193.

8 II

$C_8H_8O_6$ Dimethyl sarsapate (POWER and SALWAY), P., 372.

C_8H_9Cl *d*-α-Chloroethylbenzene, preparation and rotation of (MCKENZIE and CLOUGH), T., 694.

$C_8H_{10}O$ Phenylmethylcarbinols, optically active, interconversion of (MCKENZIE and CLOUGH), T., 687; P., 109.

$C_8H_{10}O_5$ Anhydro-acid from $\beta\beta$-dimethylpropanetricarboxylic acid (THORPE and WOOD), T., 1584.

$C_8H_{12}O_2$ Acetyl mesityl oxide, vanadium salt (MORGAN and MOSS), P., 374.

Dimethyldihydroresorcin, bromoxylenols from (CROSSLEY and RENOUF), P., 369.

dl-1-Methyl-Δ^1- and -Δ^6-*cyclo*hexene-3-carboxylic acids, resolution of (HAWORTH and PERKIN), T., 2231, 2235.

$C_8H_{12}O_5$ Hexan-ε-one-αγ-dicarboxylic acid (HAWORTH and PERKIN), T., 2231.

$C_8H_{12}O_6$ ββδ-Dimethylpropanetricarboxylic acid, and its silver salt (THORPE and WOOD), T., 1583; P., 255.

$C_8H_{14}O$ 1:2-Dimethyl-Δ^6-*cyclo*hexen-2-ol (HAWORTH), T., 1247.

$C_8H_{14}O_3$ Butyric anhydride, rate of hydration of (WILSDON and SIDGWICK), T., 1959; P., 265.

$C_8H_{16}O_6$ βγ-Dimethyl α- and β-glucoses (IRVINE and SCOTT), T., 583; P., 71.

Monomethyl methylglucoside (IRVINE and SCOTT), T., 573; P., 71.

$C_8H_{18}O$ Ethyl-*n*-amylcarbinol, resolution of (PICKARD and KENYON), T., 1944.

$C_8H_{19}N$ Dimethyl-*n*- and -*iso*-hexylamines, and their picrates (CLARKE), T., 1697.

8 III

$C_8H_4O_8N_2$ 3:4-Dinitro-*o*-phthalic acid (WARNER), P., 61.

$C_8H_5O_2I_3$ 2:4:6-Tri-iodophenyl acetate dichloride (KING and MCCOMBIE), T. 226.

$C_8H_6O_6N_2$ 3:4-Dinitro-*o*-toluic acid (WARNER), P., 61.

$C_8H_6O_8N_4$ 2:3:5-Trinitro-*p*-acetylaminophenol (MELDOLA and REVERDIN), T., 1493.

C_8H_6NI *o*-Iodo-*p*-toluonitrile (KENNER and WITHAM), T., 235.

$C_8H_7OCl_3$ 2:4:6-Trichloro-*m*-tolyl methyl ether (CROWTHER and MCCOMBIE), T., 545.

$C_8H_7O_5N$ *m*-Nitrophenoxyacetic acid (HEWITT, JOHNSON, and POPE), T., 1631.

$C_8H_8OBr_2$ 4:5-Dibromo-3-*o*-xylenol (CROSSLEY and SMITH), T., 989; P., 170.

$C_8H_8O_4N_2$ Dinitro-*o*-xylene (SIMONSEN), T., 1152.

$C_8H_8O_6N_2$ 5:6-Dinitro-3-hydroxy-*o*-tolyl methyl ether (CAIN and SIMONSEN), P., 380.

C_8H_9OBr 5-Bromo-*o*-3-xylenol (CROSSLEY), T., 2181; P., 352.

5- and 6-Bromo-*o*-4-xylenols (CROSSLEY and BARTLETT), T., 1299; P., 217.

$C_8H_9O_2N_3$ 4-Hydroxy-*m*-toluenеazoformamide, and its sodium salt (HEILBRON and HENDERSON), T., 1417.

$C_8H_9O_3N$ 5-Nitro-*o*-3-xylenol (CROSSLEY), T., 2181.

$C_8H_{10}O_2N_2$ *p*-Nitroethylaniline, sodium salt of (GREEN and ROWE), T., 512.

$C_8H_{10}NBr$ 6-Bromo-*o*-4-xylidine (CROSSLEY and BARTLETT), T., 1300.

$C_8H_{11}ON$ 5-Amino-*o*-3-xylenol (CROSSLEY), T., 2181.

$C_8H_{12}O_2N_2$ Diallyloxamide, preparation of (GLUUD), T., 942.

$C_8H_{12}O_4Br_2$ Methyl αδ-dibromoadipate (STEPHEN and WEIZMANN), T., 271; P., 14.

$C_8H_{14}O_4S_2$ Anhydride, from sulphur chloride and silver *n*-butyrate (DENHAM and WOODHOUSE), T., 1865.

$C_8H_{15}ON$ δ-Carbimidoheptane (PYMAN), T., 860.

$C_8H_{17}O_5N$ Dimethylaminoglucose (IRVINE, THOMSON, and GARRETT), T., 249; P., 7.

Ethylaminoglucose (IRVINE, THOMSON, and GARRETT), T., 246; P., 7.

α-Aminoethylglucoside, hydrochloride of (IRVINE and HYND), T., 53.

$C_8H_{18}ON_2$ δ-Heptylcarbamide (PYMAN), T., 860.

$C_8H_{19}ON$ Methyl ε-dimethylaminoamyl ether, and its picrate (CLARKE), T., 1703.

$C_8H_{21}ON$ Tetraethylammonium hydroxide, cupri- and platini-iodides of (DATTA), T., 429; P., 79.

8 IV

$C_8H_5O_2Cl_4Br$ Acetyl derivative of 2:3:4:6-tetrachloro-5-bromophenol (McCombie and Ward), T., 2005.

$C_8H_5O_2Cl_4I$ Acetyl derivative of 2:3:4:6-tetrachloro-5-iodophenol (McCombie and Ward), T., 2004.

$C_8H_4O_2Cl_3Br$ Acetyl derivative of 2:4:6-trichloro-3-bromophenol (McCombie and Ward), T., 2005.

$C_8H_4O_2Cl_3I$ Acetyl derivative of 2:4:6-trichloro-3-iodophenol (McCombie and Ward), T., 2003.

$C_8H_5O_2ClI$ 6-Chloro-2:4-di-iodophenyl acetate (King and (McCombie), T., 230.

$C_8H_5O_2Cl_3I$ 6-Chloro-2:4-di-iodophenyl acetate dichloride (King and McCombie), T., 230.

$C_8H_5O_2Br_2I$ 2:6-Dibromo-4-iodophenyl acetate (King and McCombie), T., 228.

$C_8H_5O_2Cl_2I_2$ 2:4-Di-iodophenyl acetate dichloride (King and McCombie), T., 229.

$C_8H_6O_2BrI$ 2-Bromo-4-iodophenyl acetate (King and McCombie), T., 281.

C_8H_8ONI *o*-Iodo-*p*-toluamide (Kenner and Witham), T., 236.

$C_8H_8O_2NBr$ 3-Bromo-5-nitro-*o*-xylene (Crossley and Bartlett), T., 1300.

$C_8H_8O_2N_3Br$ 5-Bromo-4-hydroxy-*m*-toluenecazoformamide (Heilbron and Henderson), T., 1418.

$C_8H_9ON_2I$ *o*-Iodo-*p*-toluhydrazide (Kenner and Witham), T., 236.

$C_8H_9O_5NS$ 3-Nitro-*o*-xylene-4- and -5-sulphonic acids, and their barium salts (Simonsen), T., 1146; P., 126.

4-Nitro-*o*-xylene-5-sulphonic acid (Simonsen), T., 1149; P., 26, 126.

$C_8H_{10}O_2NCl$ Ethyl *β*-chloropropionylcyanoacetate, and its copper compound (Weizmann, Stephen, and Agashe), T., 1857.

$C_8H_{10}O_4N_2S$ 3-Nitro-*o*-xylene-4- and -5-sulphonamides (Simonsen), T., 1146.

4-Nitro-*o*-xylene-5-sulphonamide (Simonsen), T., 1149.

$C_8H_{11}O_3NS$ 3-*o*-Xylidine 4-sulphonic acid ($+H_2O$), and its barium salt (Simonsen), T., 1149; P., 126.

o-3- and -4-Xylidine-5-sulphonic acids ($+H_2O$), and their barium salts (Simonsen), T., 1147; P., 126.

o-3- and -4-Xylidine-6-sulphonic acids, and their barium salts (Simonsen), T., 1150; P., 126.

$C_8H_{16}ONBr$ α-Propylvalerobromoamide (Pyman), T., 857.

8 V

$C_8H_5ONCl_3I$ 2:4:6-Trichloro-3-iodoacetanilide (McCombie and Ward), T., 1999.

$C_8H_5O_2Cl_2Br_2I$ 2:6-Dibromo-4-iodophenyl acetate dichloride (King and McCombie), T., 228.

$C_8H_6O_2Cl_2BrI$ 2-Bromo-4-iodophenyl acetate dichloride (King and McCombie), T., 231.

$C_8H_5O_4NSCl$ 3-Nitro-*o*-xylene-5-sulphonyl chloride (Simonsen), T., 1146.

C_9 Group.

C_9H_{14} 1-Methyl-2-*iso*propenyl-Δ^1-*cyclo*pentene (Haworth), T., 1249; P., 193.

9 II

C_9H_7N Quinoline, cupri-iodide of (Datta), T., 432; P., 80.

$C_9H_{11}N$ *N*-Methyldihydro*iso*indole (Hope and Lankshear), P., 224.

$C_9H_{12}O_2$ 2:3-Dimethoxytoluene (CAIN and SIMONSEN), P., 380.

$C_9H_{14}O_2$ 3-Ethoxy-1-methyl-Δ^3-*cyclo*hexen-5-one (GILLING), T., 2032.

Acetyl derivative of 2:2:3:3-tetramethyl*bicyclo*-[0,1,2]pentan-4-ol-5-one (FRANCIS and WILLSON), T., 2244.

$C_9H_{14}O_3$ Acid, and its silver salt from oxidation of bornylene (HENDERSON and CAW), T., 1547; P., 246.

$C_9H_{14}O_4$ α-Hydroxy-$\beta\gamma$-tetramethylglutarolactone, and its silver salt (FRANCIS and WILLSON), T., 2243.

$C_9H_{14}O_5$ α-Keto-$\beta\gamma$-tetramethylglutaric acid, and its silver salt (FRANCIS and WILLSON), T., 2243.

$C_9H_{16}O$ 1:1:2:2-Tetramethyl*cyclo*pentan-4-one (FRANCIS and WILLSON), T., 2245; P., 302.

$C_9H_{16}O_4$ αβ-Tetramethylglutaric acid (FRANCIS and WILLSON), T., 2245.

$C_9H_{18}O_6$ $\gamma\epsilon\zeta$-Trimethyl glucose (IRVINE and SCOTT), T., 574; P., 71.

$\beta\gamma$-Dimethyl methylglucoside (MACDONALD), T., 1903; P., 261.

$\beta\gamma$-Dimethyl-α-methylglucoside (IRVINE and SCOTT), T., 582; P., 71.

$C_9H_{21}N$ Dimethyl-*n*- and *iso*-heptylamines, and their picrates (CLARKE), T., 1697.

$C_9H_{22}N_2$ Tetramethylpentamethylenediamine, and its salts (CLARKE) T., 1701.

9 III

$C_9H_6O_2Cl_4$ Acetyl derivative of 2:4:5:6-tetrachloro-*m*-cresol (CROWTHER and MCCOMBIE), T., 547.

$C_9H_7O_2Cl_3$ Acetyl derivative of 2:4:6-trichloro-*m*-cresol (CROWTHER and MCCOMBIE), T., 546.

$C_9H_7O_2I$ Iodocinnamic acids, investigation of (JAMES), T., 1368; P., 173.

$C_9H_7O_7N$ 3- and 5-Nitro-4-methoxyphthalic acids (CAIN and SIMONSEN), P., 381.

$C_9H_8O_4N_2$ Acetyl derivatives of *o*-, *m*-, and *p*-benz*anti*aldoximes (BRADY and DUNN), T., 1624.

$C_9H_9ON_3$ 3- and 4-Acetyl-3:4-tolylenediazoimides (MORGAN and MICKLETHWAIT), T., 1396; P., 232.

$C_9H_9O_3N_3$ 3:5-Dicyano-2:6-diketo-4:4-dimethylpiperidine (THORPE and WOOD), T., 1592.

$C_9H_9O_2Cl$ *p*-Methoxyphenylacetyl chloride (CAIN, SIMONSEN, and SMITH), T., 1036.

$C_9H_9O_2I$ Methyl *o*-iodo-*p*-toluate (KENNER and WITHAM), T., 235.

$C_9H_9O_3N$ *o*-Aldehydophenylglycine (GLUUD), T., 1251; P., 190.

$C_9H_9O_3N_3$ 4-Acetoxybenzeneazoformamide (HEILBRON and HENDERSON), T., 1415.

$C_9H_9O_4N$ *o*-Carbamylphenoxyacetic acid (MERRIMAN), T., 1844; P., 258.

$C_9H_9O_6N$ 5- and 6-Nitro-2:3-dimethoxybenzoic acid (CAIN and SIMONSEN), P., 380.

$C_9H_{10}O_3N_2$ Oxime of *o*-aldehydophenylglycine (GLUUD), T., 1253; P., 190.

$C_9H_{11}ON$ *d*- and *l*-Hydroxyhydrindamines, hydrobromides of (POPE and READ), T., 447.

$C_9H_{11}O_2N_3$ Oxime of *o*-aldehydophenylglycineamide (GLUUD), T., 1252; P., 190.

$C_9H_{11}O_3N$ 5-Nitro-4-methoxy-*o*-xylene (CAIN and SIMONSEN), P., 381.

$C_9H_{11}O_4N$ 5- and 6-Nitro-2:3-dimethoxytoluenes (CAIN and SIMONSEN), P., 380.

$C_9H_{11}O_4N_3$ 4:6-Dinitro-3-methylamino-*o*-xylene (CROSSLEY and PRATT), T., 987.

3:5-Dinitro-4-methylamino-*o*-xylene (CROSSLEY and PRATT), T., 985.

$C_9H_{11}O_5N$ 2-Nitroveratryl alcohol (KAY and PICTET), T., 952.

$C_9H_{12}ON_2$ 1-Hydroxy-2-hydrazinohydrindene, externally compensated, resolution of, and its salts (PEACOCK), T., 669; P., 109.

$C_9H_{12}OBr_2$ Dibromophorone (FRANCIS and WILLSON), T., 2241.

$C_9H_{12}O_2N_6$ Toluquinonedisemicarbazone (HEILBRON and HENDERSON), T., 1418.

$C_9H_{12}O_4N_2$ 2-Nitro-5:6-dimethoxy-*m*-toluidine (CAIN and SIMONSEN), P., 380.

$C_9H_{13}O_2Br$ 1-Bromo-2:2:3:3-tetramethyl*bicyclo*[0,1,2]pentan-4-ol-5-one (FRANCIS and WILLSON), T., 2241; P., 302.

$C_9H_{13}O_4N$ Ethyl ethoxyacetylcyanoacetate, and its copper compound (WEIZMANN, STEPHEN, and AGASHE), T., 1856.

$C_9H_{13}ON_3$ Semicarbazone of 2-acetyl-1-methyl-Δ^1-*cyclo*pentene (HAWORTH), T., 1249.

$C_9H_{15}O_3N_3$ Nitrosodiallylaminopropionic acid (FRANKLAND and SMITH), T., 1002; P., 158.

$C_9H_{16}ON_2$ Phenylmethylethylazonium hydroxide, and its salts, preparation of, and resolution of the iodide (SINGH), T., 604; P., 109.

$C_9H_{16}O_2N_2$ Diallylaminopropionic acid, salts of (FRANKLAND and SMITH), T., 1002; P., 158.

Nitrosotriacetonamine, catalytic decomposition of, by alkalis (FRANCIS and GEAKE), T., 1722; P., 249.

$C_9H_{16}O_2N_6$ Disemicarbazones of 1- and 2-methyldihydroresorcin (GILLING), T., 2032.

$C_9H_{19}O_2N$ Methyl δ-heptylcarbamate (PYMAN), T., 861.

$C_9H_{19}O_3N_3$ Nitrosodipropylaminopropionic acid (FRANKLAND and SMITH), T., 1000; P., 158.

$C_9H_{20}O_2N_2$ αβ-Dipropylaminopropionic acid, salts of (FRANKLAND and SMITH), T., 998; P., 158.

$C_9H_{21}ON$ Methyl ζ-dimethylaminohexyl ether, and its picrate (CLARKE), T., 1704.

9 IV

$C_9H_{10}O_4NCl$ 2-Nitroveratryl chloride (KAY and PICTET), T., 953.

$C_9H_{11}ONBr_2$ 2:6-Dibromo-4-trimethylammonium-1-benzoquinone ($+3H_2O$), and its salts (MELDOLA and HOLLELY), T., 185.

$C_9H_{11}ONI_2$ 2:6-Di-iodo-4-trimethylammonium-1-benzoquinone ($+3H_2O$), and its salts (MELDOLA and HOLLELY), T., 187.

$C_9H_{11}O_3N_2Br$ 2-Bromo-6-nitro-4-trimethylammonium-1-benzoquinone ($+2H_2O$) (MELDOLA and HOLLELY), T., 184.

$C_9H_{11}O_3N_2I$ 2-Iodo-6-nitro-4-trimethylammonium-1-benzoquinone, and its chloride (MELDOLA and HOLLELY), T., 181.

$C_9H_{16}O_2N_2Br_4$ Tetrabromodipropylaminopropionic acid (FRANKLAND and SMITH), T., 1003.

C_{10} Group.

$C_{10}H_{12}$ *iso*Butenylbenzene (THORPE and WOOD), T., 1578.

$C_{10}H_{16}$ Bornylene, oxidation of, with hydrogen peroxide (HENDERSON and CAW), T., 1543; P., 246.

Sylvestrene, constitution and derivatives of (HAWORTH, PERKIN, and WALLACH), T., 1228; P., 223.

d- and *l*-Sylvestrenes, synthesis of (HAWORTH and PERKIN), T., 2225; P., 356.

Hydrocarbons, from geranyl chloride (FORSTER and CARDWELL), T., 1342, 1543; P., 244.

10 II

$C_{10}H_8O$ β-Naphthol, constitution of (NOLAN and SMILES), P., 197.

$C_{10}H_8N_2$ 2-Dipyridyl, absorption spectra of (PURVIS), T., 2283.

$C_{10}H_{12}O_3$ Methyl *l*-α- and *dl*-β-hydroxy-β-phenylpropionates (MCKENZIE and MARTIN), T., 114.

$C_{10}H_{13}N$ *N*-Methyl-1:2:3:4-tetrahydroquinoline (*kairoline*), salts of (THORPE and WOOD), T., 1611.

$C_{10}H_{14}O_2$ Camphorquinone, condensation of, with phenols (SEN-GUPTA and DEY), P., 155.

$C_{10}H_{14}N_2$ Nicotine, absorption spectrum and constitution of (DOBBIE and FOX), T., 1193; P., 180.

$C_{10}H_{16}O$ *l*-Epicamphor (BREDT and PERKIN), T., 2182; P., 356.

$C_{10}H_{16}O_3$ Ethyl 2:6-dimethyl-2:3-dihydro-1:4-pyran-5-carboxylate (FARGHER and PERKIN), P., 72.

Methyl ester of acid from oxidation of bornylene (HENDERSON and CAW), T., 1547; P., 246.

$C_{10}H_{16}O_4$ Ethyl α- and β-methylglutaconates (THORPE and WOOD), T., 1582.

$C_{10}H_{16}O_5$ Ethyl ethoxyacetylacetoacetate, and its copper compound (WEIZMANN, STEPHEN, and AGASHE), T., 1858.

$C_{10}H_{16}N_2$ Substance, from β-aminocamphor and hydrazine (FORSTER and HOWARD), T., 67.

$C_{10}H_{17}Cl$ Geranyl chloride (*θ-chloro-βζ-dimethyl-Δ$^{\beta\zeta}$-octadiene*) (FORSTER and CARDWELL), T., 1338; P., 244.

$C_{10}H_{18}O$ *l*-Fenchyl alcohol, preparation of (PICKARD, LEWCOCK, and YATES), P., 127.

Terpineol, isolation of, and its conversion into its acid esters (PICKARD, LEWCOCK, and YATES), P., 127.

l-Epiborneol (BREDT and PERKIN), T., 2222.

l-Δ^1- and *d*-Δ^6-*m*-Menthenol(8) (HAWORTH and PERKIN), T., 2233, 2237.

$C_{10}H_{18}O_2$ Alcohols(2) from oxidation of bornylene (HENDERSON and CAW), T., 1549; P., 246.

$C_{10}H_{18}O_6$ Methylglucoside-εζ-monoacetone (MACDONALD), T., 1902; P., 261.

$C_{10}H_{19}N$ *d-n-* and *-neo*Bornylamine, hydrobromides of (POPE and READ), T., 456.

Geranylamine (*θ-amino-βζ-dimethyl-Δ$^{\beta\zeta}$-octadiene*) and its salts (FORSTER and CARDWELL), T., 1343; P., 244.

$C_{10}H_{20}O$ Ethyl *n*-heptyl ketone (PICKARD and KENYON), T., 1945.

$C_{10}H_{22}O$ Ethyl-*n*-heptylcarbinol, resolution of, and its salts (PICKARD and KENYON), T., 1945.

$C_{10}H_{23}N$ Dimethyl-*n-* and *-iso*-octylamines, and their picrates (CLARKE), T., 1698.

$C_{10}H_{24}N_2$ Tetramethylhexamethylenediamine, and its picrate (CLARKE), T., 1701.

10 III

$C_{10}H_6O_6N_4$ 2:4:5-Trinitro-α-naphthylamine (RINDL), T., 1915; P., 264.

$C_{10}H_9OCl_5$ 2:4:4:5-Tetrachloro-3-methyl-6-β-chloro*iso*propyl-Δ$^{2:5}$-*cyclo*hexadienone (CROWTHER and MCCOMBIE), T., 544; P., 69.

$C_{10}H_{10}O_2Br_2$ Acetyl derivative of 4:5-dibromo-3-*o*-xylenol (CROSSLEY and SMITH), T., 991; P., 170.

$C_{10}H_{10}O_4N_2$ 2-Nitrohomoveratronitrile (KAY and PICTET), T., 954.

$C_{10}H_{11}ON$ Styryl aminomethyl ketone, salts of (FOULDS and ROBINSON), T., 1768.

$C_{10}H_{11}OCl_3$ 2:4:4-Trichloro-3-methyl-6-*iso*propyl-$\Delta^{2:5}$-*cyclo*hexadienone (CROWTHER and MCCOMBIE), T., 543; P., 68.

$C_{10}H_{11}O_2N$ 3-Amino-*p*-tolylacrylic acid (SALWAY), T., 1993; P., 287.

$C_{10}H_{11}O_2N_3$ 3:5-Dicyano-2:6-diketo-4-methyl-4-ethylpiperidine (THORPE and WOOD), T., 1592.

$C_{10}H_{11}O_2I$ Ethyl *o*-iodo-*p*-toluate (KENNER and WITHAM), T., 236.

$C_{10}H_{11}O_4N_3$ Dinitro-*N*-methyl-1:2:3:4-tetrahydroquinoline (THORPE and WOOD), T., 1611.

$C_{10}H_{11}O_6N$ 2-Nitrohomoveratric acid (KAY and PICTET), T., 955.

$C_{10}H_{12}O_2Br_2$ Substance, from diazomethane and 5:5-dibromo-1:1:2:2-tetramethyl-*cyclo*pentane-3:4-dione (FRANCIS and WILLSON), T., 2247.

$C_{10}H_{12}N_6Fe$ α- and β-Tetramethylferrocyanides (HARTLEY), T., 1196; P., 188.

$C_{10}H_{13}O_2N$ β-3-Amino-*p*-tolylpropionic acid (SALWAY), T., 1904; P., 287.

$C_{10}H_{13}O_5N_3$ *dl*- and *l*-Hydroxy-2-semicarbazinohydrindene (PEACOCK), T., 673.

$C_{10}H_{13}O_4N_3$ 4:6-Dinitro-3-dimethylamino-*o*-xylene (CROSSLEY and PRATT), T., 987.

3:5-Dinitro-4-dimethylamino-*o*-xylene (CROSSLEY and PRATT), T., 985.

4:6-Dinitro-3-ethylamino-*o*-xylene (CROSSLEY and PRATT), T., 987.

3:5-Dinitro-4-ethylamino-*o*-xylene (CROSSLEY and PRATT), T., 986.

$C_{10}H_{14}O_5V$ Vanadium oxybisacetylacetonate (MORGAN and MOSS), T., 86.

$C_{10}H_{15}OBr$ Bromo-*l*-epicamphor (BREDT and PERKIN), T., 2209.

$C_{10}H_{15}O_2N$ α- and β-*iso*Nitroso-*l*-epicamphor (BREDT and PERKIN), T., 2211.

Oximino-derivatives of camphorquinone, configuration of (FORSTER), T., 662; P., 104.

$C_{10}H_{15}O_2N_3$ γ-Allylaminomethyl-β-allylhydantoin, hydrochloride of (FRANKLAND and SMITH), T., 1003; P., 158.

$C_{10}H_{16}O_4N_2$ Nitrosate of hydrocarbon, from geranyl chloride (FORSTER and CARDWELL), T., 1342; P., 244.

$C_{10}H_{16}O_4Br_2$ Ethyl αδ-dibromoadipate (STEPHEN and WEIZMANN), T., 271; P., 14.

$C_{10}H_{17}ON$ Amino-*l*-epicamphor (BREDT and PERKIN), T., 2212.

l-Epicamphoroxime (BREDT and PERKIN), T., 2208.

Substance, from heating β-aminocamphor (FORSTER and HOWARD), T., 68.

$C_{10}H_{17}O_3N_3$ β-Allylamino-α-allylcarbamidopropionic acid (FRANKLAND and SMITH), T., 1003.

$C_{10}H_{18}O_4N_2$ Nitrosate of hydrocarbon, from geranyl chloride (FORSTER and CARDWELL), T., 1343; P., 244.

$C_{10}H_{18}O_4S_2$ Anhydride, from sulphur chloride and silver *iso*valerate (DENHAM and WOODHOUSE), T., 1866.

$C_{10}H_{19}ON_3$ Semicarbazone of 1:1:2:2-tetramethyl*cyclo*pentan-4-one (FRANCIS and WILLSON), T., 2245.

$C_{10}H_{19}O_2N_3$ γ-Propylaminomethyl-β-propylhydantoin, hydrochloride of (FRANKLAND and SMITH), T., 1001.

$C_{10}H_{21}O_2N$ Ethyl δ-heptylcarbamate (PYMAN), T., 861.

$C_{10}H_{21}O_3N_3$ β-Propylamino-α-propylcarbamidopropionic acid (FRANKLAND and SMITH), T., 1000.

10 IV

$C_{10}H_4O_6N_3Cl$ 1-Chloro-2:4:5- and -2:4:8-trinitronaphthalenes (RINDL), T., 1912; P., 263.

$C_{10}H_{12}ONBr$ Acetyl derivative of 6-bromo-*o*-4-xylidine (CROSSLEY and BARTLETT), T., 1300.

$C_{10}H_{17}O_4N_2Cl$ Nitrosate of geranyl chloride (FORSTER and CARDWELL), T., 1341; P., 244.

C_{11} Group.

$C_{11}H_8O_6$ Substance, from acetonedicarboxylic acid and pyrogallol (DEY), P., 154.

$C_{11}H_8N_2$ Nor*iso*harman, and its salts (PERKIN and ROBINSON), T., 1988.

$C_{11}H_9N$ 4-Phenylpyridine, absorption spectra of (PURVIS), T., 2284.

$C_{11}H_{10}N_2$ Substance, from the oil of *Cydnus indicus* (WATSON), T., 550; P., 28.

$C_{11}H_{10}O_4$ Ethyl coumaronecarboxylate, constitution of, and its ammonium salt (MERRIMAN), T., 1838; P., 257.

$C_{11}H_{11}N$ 4:7-Dimethylquinoline, and its picrate (EWINS and KING), T., 109.

4:8-Dimethylquinoline, and its salts (EWINS and KING), T., 107.

β-Cytisolidine (6:8-*dimethylquinoline*), synthesis of (EWINS), T., 102.

$C_{11}H_{14}O_3$ Ethyl *p*-methoxyphenylacetate (CAIN, SIMONSEN, and SMITH), T., 1036.

Ethyl *o*-, *m*-, and *p*-tolyloxyacetates (HEWITT, JOHNSON, and POPE), T., 1629.

$C_{11}H_{15}N$ 4-Phenylpiperidine, absorption spectra of (PURVIS), T., 2285.

4:6- and 4:7-Dimethyl-1:2:3:4-tetrahydroquinolines, and their salts (EWINS and KING), T., 110.

4:8-Dimethyl-1:2:3:4-tetrahydroquinoline, and its picrate (EWINS and KING), T., 108.

N-Ethyl-1:2:3:4-tetrahydroquinoline, preparation of, and its salts (THORPE and WOOD), T., 1609.

α-Cytisolidine (6:8-*dimethyl*-1:2:3:4-*tetrahydroquinoline*), and its picrate (EWINS), T., 103.

$C_{11}H_{16}O_2$ αγ- and βγ-Dihydroxy-α-phenyl*iso*pentanes, optically active (MCKENZIE and MARTIN), T., 114.

Oxymethylenecamphor, optically active and externally compensated forms of (POPE and READ), T., 445; P., 78.

d-Bornylene-3-carboxylic acid, preparation of, and its barium salt (BREDT and PERKIN), T., 2196.

l-Bornylene-2-carboxylic acid (BREDT and PERKIN), T., 2219.

$C_{11}H_{16}O_3$ 3- and 4-Methyl*cyclo*hexane-1:1-diacetic anhydrides (THORPE and WOOD), T., 1595.

l-Epicamphorcarboxylic acid (BREDT and PERKIN), T., 2213.

$C_{11}H_{16}O_5$ Ethyl phenoxyacetylacetoacetate (WEIZMANN, STEPHEN, and AGASHE), T., 1859.

$C_{11}H_{16}O_7$ Acetyl derivative from methylated cellulose (DENHAM and WOODHOUSE), T., 1741.

$C_{11}H_{18}O_2$ *l*-Camphane-2-carboxylic acid (BREDT and PERKIN), T., 2219.

Camphane-3-carboxylic acid, preparation of (BREDT and PERKIN), T., 2198.

$C_{11}H_{18}O_3$ *l*-Epiborneolcarboxylic acids (BREDT and PERKIN), T., 2216.

$C_{11}H_{18}O_4$ Ethyl αγ-dimethylglutaconate (THORPE and WOOD), T., 1757.

Ethyl α-ethylglutaconate (THORPE and WOOD), T., 1582.

Ethyl 1-methyl*cyclo*butane-2:2-dicarboxylate (BLACKSTOCK and PERKIN), P., 74.

3- and 4-Methyl*cyclo*hexane-1:1-diacetic acids, and their salts (THORPE and WOOD), T., 1595; P., 256.

$C_{11}H_{18}O_6$ Ethyl ethoxyacetylmalonate, and its copper compound (WEIZMANN, STEPHEN, and AGASHE), T., 1858.

$C_{11}H_{22}O$ Ethyl *n*-octyl ketone (PICKARD and KENYON), T., 1946.

$C_{11}H_{22}O_3$ α-Hydroxy-*n*-undecoic acid (PICKARD and KENYON), T., 1947.

$C_{11}H_{24}O$ Ethyl-*n*-octylcarbinol, resolution of (PICKARD and KENYON), T., 1946.

$C_{11}H_{26}N_2$ Tetramethylheptamethylenediamine, and its picrate (CLARKE), T., 1701.

11 III

$C_{11}H_7O_7N_3$ 2:4:5-Trinitro-α-naphthyl methyl ether (RINDL), T., 1916; P., 264.

$C_{11}H_7N_2Cl$ Chlorono*r*-*iso*harman (PERKIN and ROBINSON), T., 1981.

$C_{11}H_9ON_2$ Lactam of 2-aminoquinoline-3-acetic acid (PERKIN and ROBINSON), T., 1982.

$C_{11}H_9O_3N$ Carbostyril-3-acetic acid (PERKIN and ROBINSON), T., 1980.

$C_{11}H_9O_4N$ α-Cyanomeconine (G. M. and R. ROBINSON), P., 267.

$C_{11}H_{10}O_2N_2$ Carbostyril-3-acetamide (PERKIN and ROBINSON), T., 1981.

$C_{11}H_{11}ON$ 2-Hydroxy-4:8-dimethylquinoline (EWINS and KING), T., 107.

3-Acetyl-2-methylindole (SALWAY), T., 354.

$C_{11}H_{11}O_3Na$ Ethyl sodiobenzoylacetate, action of αγ-dibromobutane on (FARGHER and PERKIN), P., 72.

$C_{11}H_{11}O_4N$ *o*-Aldehydosuccinanilic acid (PERKIN and ROBINSON), T., 1979.

$C_{11}H_{11}O_8N_3$ Diacetyl derivative of 4:6-dinitroguaiacol (MELDOLA and REVERDIN), T., 1489.

$C_{11}H_{12}ON_2$ Oxime of 3-acetyl-2-methylindole (SALWAY), T., 355.

$C_{11}H_{12}O_7N_4$ Diacetyl derivative of 3:5-dinitro-2:4-diaminoanisole (MELDOLA and REVERDIN), T., 1490.

$C_{11}H_{13}O_2N$ Acetoaceto-*o*-, -*m*-, and -*p*-toluidides (EWINS and KING), T., 106.

$C_{11}H_{14}ON_2$ α-Benzoylamino-γ-methyleneaminopropane (TITHERLEY and BRANCH), T., 338; P., 29.

Benzoylhexahydropyrimidine, salts of (TITHERLEY and BRANCH), T., 338.

Cytisine, constitution of (EWINS), T., 97.

$C_{11}H_{14}OCl_2$ 2:6-Dichlorothymol methyl ether (CROWTHER and MCCOMBIE), T., 544; P., 68.

$C_{11}H_{14}O_4N_2$ Dinitro-*N*-ethyl-1:2:3:4-tetrahydroquinoline (THORPE and WOOD), T., 1610.

$C_{11}H_{15}OCl$ Bornylene-3-carboxyl chloride (BREDT and PERKIN), T., 2197.

$C_{11}H_{15}O_3N_3$ 4-Hydroxy-2-methyl-5-*iso*propylbenzeneazoformamide, and its sodium salt (HEILBRON and HENDERSON), T., 1419.

$C_{11}H_{15}O_3Br$ Acetyl derivative of 1-bromo-2:2:3:3-tetramethyl*bicyclo*[0,1,2,] pentan-4-ol-5-one (FRANCIS and WILLSON), T., 2242.

α-Bromo-*l*-epicamphorcarboxylic acid (BREDT and PERKIN), T., 2215.

$C_{11}H_{15}O_4Br$ Carbomethoxy-derivative of 1-bromo-2:2:3:3-tetramethyl*bicyclo*[0,1,2,]pentan-4-ol-5-one (FRANCIS and WILLSON), T., 2242.

$C_{11}H_{17}ON$ Bornylene-3-carboxylamide (BREDT and PERKIN), T., 2197.

$C_{11}H_{17}ON_2$ *l*-Bornylene-2-hydroxamic acid (BREDT and PERKIN), T., 2221.

$C_{11}H_{17}O_2N$ Imides of 3- and 4-methyl*cyclo*hexane-1:1-diacetic acids (THORPE and WOOD), T., 1595.

Camphorcarboxylamide, isomeric changes in (LOWRY and GIBSON), T., 913.

d-Bornylene-3-hydroxamic acid (BREDT and PERKIN), T., 2203.

$C_{11}H_{18}ON_2$ *d*-Bornylene-3-carboxylic hydrazide, and its hydrochloride (BREDT and PERKIN), T., 2202.

Camphorquinone α- and β-methylhydrazones (FORSTER and CARDWELL), T., 867; P., 150.

$C_{11}H_{19}ON_3$ *l*-Epicamphorsemicarbazone (BREDT and PERKIN), T., 2209.

$C_{11}H_{19}O_2N$ Substance ($+\frac{1}{2}H_2O$), from *iso*nitrosoepicamphor and magnesium methyl iodide (FORSTER), T., 669.

$C_{11}H_{19}O_2N_3$ α- and β-Semicarbazones of β-hydroxycamphor (FORSTER and HOWARD), T., 69.

$C_{11}H_{20}ON_2$ Carbamide from geranylamine (FORSTER and CARDWELL), T. 1344.

$C_{11}H_{20}O_2N_4$ 1:7-Dipropyltetrahydrouric acid (FRANKLAND and SMITH), T., 1001; P., 158.

$C_{11}H_{21}O_2Br$ α-Bromo-*n*-undecoic acid (PICKARD and KENYON), T., 1947.
$C_{11}H_{24}ON_2$ *s*-Di-γ-amylcarbamide (PYMAN), T., 857.

11 IV

$C_{11}H_{10}ONCl$ 3-Chloroacetyl-2-methylindole (SALWAY), T., 354.
$C_{11}H_{11}ON_4Cl$ 1-Phenyl-2:3-dimethylpyrazolone-4-diazonium chloride, aurichloride (MORGAN and REILLY), T., 814
$C_{11}H_{13}O_2N_3Br_2$ Dibromo-4-hydroxy-2-methyl-5-*iso*propylbenzeneazoformamide (HEILBRON and HENDERSON), T., 1420.
$C_{11}H_{14}O_2N_3Br$ 3-Bromo-4-hydroxy-2-methyl-5-*iso*propylbenzeneazoformamide (HEILBRON and HENDERSON), T., 1419.

C_{12} Group.

$C_{12}H_{10}$ Acenaphthene, refractivity of (CROMPTON and SMYTH), T., 1302; P., 224.
$C_{12}O_9$ Mellitic anhydride (JARRARD), P., 106.

12 II

$C_{12}H_6O_{12}$ Mellitic acid, and its salts (JARRARD), P., 106.
$C_{12}H_6Br_2$ Dibromodiphenylene (DOBBIE, FOX, and GAUGE), T., 39.
$C_{12}H_9Cl$ 3-Chloroacenaphthene, refractivity of (CROMPTON and SMYTH), T., 1303; P., 224.
$C_{12}H_9Br$ 3-Bromoacenaphthene, refractivity of (CROMPTON and SMYTH), T., 1303; P., 224.
$C_{12}H_9I$ 3-Iodoacenaphthene, refractivity of (CROMPTON and SMYTH), T., 1304; P., 224.
$C_{12}H_{10}O_2$ 2-Phenyl-6-methyl-4-pyrone, attempted resolution of the salts o. (LEVY, HOLMYARD, and RUHEMANN), P., 159.
$C_{12}H_{10}O_3$ 6-Hydroxy-4-phenyl-3-methyl-2-pyrone (THORPE and WOOD), T., 1576.
$C_{12}H_{10}O_4$ Substance, from acetonedicarboxylic acid and *p*-cresol (DEY), P., 154.
$C_{12}H_{10}O_5$ Substance, from orcinol and acetonedicarboxylic acid (DEY), P., 154.
$C_{12}H_{10}N_2$ *iso*Harman, synthesis of, and its salts (PERKIN and ROBINSON), T., 1973; P., 290.
$C_{12}H_{12}O_4$ β-Phenyl-α-methylglutaconic acids, and their salts (THORPE and WOOD), T., 1575; P., 253.
$C_{12}H_{13}N_3$ Acetone-2-quinolylhydrazine (PERKIN and ROBINSON), T., 1978.
$C_{12}H_{14}O_2$ α-Phenylhexane-αε-dione (FARGHER and PERKIN), P., 73.
$C_{12}H_{14}O_4$ Ethyl *p*-methoxyphenylpyruvate (CAIN, SIMONSEN, and SMITH) T., 1036.
$C_{12}H_{16}O_2$ α-Phenylhexan-ε-ol-α-one (FARGHER and PERKIN), P., 73.
$C_{12}H_{16}O_3$ Ethyl 3:4-dimethoxyphenylacetate (CAIN, SIMONSEN, and SMITH), T., 1038.
$C_{12}H_{16}O_5$ Methoxymethylfisetol dimethyl ether (PERKIN), T., 1636; P., 253.
$C_{12}H_{16}O_6$ Gossypitol tetramethyl ether (PERKIN), T., 653; P., 110.
$C_{12}H_{17}N$ 1:6:8-Trimethyl-1:2:3:4-tetrahydroquinoline, hydriodide of (EWINS), T., 104.
$C_{12}H_{18}O_2$ Methyl bornylene-2- and -3-carboxylates (BREDT and PERKIN), T., 2198, 2218.
$C_{12}H_{20}O_2$ Geranylacetic acid (FORSTER and CARDWELL), T., 1346.
$C_{12}H_{20}O_4$ *cis*-Ethyl ααβ-trimethylglutaconate (THORPE and WOOD), T., 1759.

$C_{12}H_{22}O$ Geranyl ethyl ether (FORSTER and CARDWELL), T., 1342.

$C_{12}H_{22}O_6$ $\gamma\epsilon\zeta$-Trimethyl glucosemonoacetone (IRVINE and SCOTT), T., 574; P., 71.

$\beta\gamma$-Dimethyl methylglucoside-$\epsilon\zeta$-monoacetone (MACDONALD), T., 1903; P., 261.

$C_{12}H_{26}O$ Ethyl-*m*-nonylcarbinol, resolution of, and its salts (PICKARD and KENYON), T., 1947.

12 III

$C_{12}H_4O_8N_4$ Tetranitrodiphenylene (DOBBIE, FOX, and GAUGE), T., 39.

$C_{12}H_6O_2N_4$ Bisbenz*iso*oxadiazole (GREEN and ROWE), T., 2028; P., 276.

$C_{12}H_6O_4N_2$ Dinitrodiphenylene (DOBBIE, FOX, and GAUGE), T., 40.

$C_{12}H_6O_4N_4$ Bisbenz*iso*oxadiazole oxide (GREEN and ROWE), T., 2026; P., 276.

Substance, from oxidation of dinitrobenzidine (m.p. 233°) (GREEN and ROWE), T., 2028; P., 276.

$C_{12}H_6O_{10}N_6$ Tetranitro-*p*-azophenol (ROBERTSON), T., 1476.

$C_{12}H_8O_6N_2$ 3:3′- and 3:5′-Dinitro-4:4′-diphenols (CAIN, COULTHARD, and MICKLETHWAIT), T., 2083.

$C_{12}H_8O_6N_4$ Dinitro-*p*-azophenol (ROBERTSON), T., 1476.

$C_{12}H_9NSe$ Selenodiphenylamine (WEIZMANN and STEPHEN), P., 196.

$C_{12}H_{10}O_2N_2$ *p*-Azophenol, isomerism of (ROBERTSON), T., 1472; P., 221.

$C_{12}H_{10}O_4N_4$ *o*-Dinitrobenzidines, absorption spectra and constitution of the (CAIN, MACBETH, and STEWART), T., 586; P., 77; derivatives of (CAIN, COULTHARD, and MICKLETHWAIT), T., 2074; P., 289.

Diphenoquinonetetraoxime (GREEN and ROWE), T., 2027; P., 276.

$C_{12}H_{10}O_6N_4$ 2:4:5-Trinitro-α-naphthyldimethylamine (RINDL), T., 1916.

2:4:5-Trinitro-α-naphthylethylamine (RINDL), T., 1916.

$C_{12}H_{11}O_3N$ Methyl carbostyril-3-acetate (PERKIN and ROBINSON), T., 1981.

$C_{12}H_{12}O_2Si$ Diphenylsilicanediol, condensation products of (KIPPING and ROBISON), P., 374.

$C_{12}H_{13}O_2N_3$ ω-Imide of αα′-dicyano*cyclo*hexane-1:1-diacetic acid (THORPE and WOOD), T., 1592.

$C_{12}H_{15}ON$ Benzoylpiperidine, absorption spectra of (PURVIS), T., 2285.

$C_{12}H_{15}OBr$ ε-Bromo-α-phenylhexan-α-one (FARGHER and PERKIN), P., 73.

$C_{12}H_{15}O_3N$ Monoacetyl derivative of β-3-amino-*p*-tolylpropionic acid (SALWAY), T., 1904.

2:4-Xylylsuccinamic acid (SALWAY), T., 1991; P., 287.

$C_{12}H_{16}ON_2$ Methylcytosine, and its picrate (POWER and SALWAY), T., 194; P., 2.

$C_{12}H_{16}O_2N_2$ 2:4-Xylylsuccinamide (SALWAY), T., 1992.

$C_{12}H_{17}O_2N$ Ethyl β-3-amino-*p*-tolylpropionate, and its hydrochloride (SALWAY), T., 1904.

Ethyl phenylethylaminoacetate, and its platinichloride (THORPE and WOOD), T., 1607.

$C_{12}H_{17}O_3N$ α-Dimethylamino-γ-phenoxybutyric acid, and its salts (SALWAY), T., 357.

$C_{12}H_{19}O_3V$ Vanadium oxybisacetylmethylacetonate (MORGAN and MOSS), T., 88.

$C_{12}H_{19}O_4N$ Ethyl α-cyano-ββ-dimethylpropanedicarboxylate (THORPE and WOOD), T., 1583.

$C_{12}H_{19}O_6N$ Ethyl glycylmethylenemalonate (LEVY), P., 353.

$C_{12}H_{21}ON$ Acetyl derivative of geranylamine (FORSTER and CARDWELL), T., 1344.

$C_{12}H_{29}ON$ Tetrapropylammonium hydroxide, cupri-iodide of (DATTA), T., 432; P. 80.

12 IV

$C_{12}H_6O_2N_2Br_4$ α- and β-Tetrabromo-*p*-azophenols (ROBERTSON), T., 1477.

$C_{12}H_6O_4N_2Cl_2$ 4:4′-Dichloro-3:3′-dinitrodiphenyl (CAIN, COULTHARD, and MICKLETHWAIT), T., 2080.

$C_{12}H_6O_4N_2Br_2$ 4:4′-Dibromo-3:3′- and -3:5′-dinitrodiphenyl (CAIN, COULTHARD, and MICKLETHWAIT), T., 2081.

$C_{12}H_6O_4N_2I_2$ 4:4′-Di-iodo-3:3′- and-3:5′-dinitrodiphenyl (CAIN, COULTHARD, and MICKLETHWAIT), T., 2082.

$C_{12}H_6O_6N_4Br_2$ Dibromodinitro-*p*-azophenol (ROBERTSON), T., 1477.

$C_{12}H_7O_2Cl_2I_3$ 2:4:6-Tri-iodophenylbenzoate dichloride (KING and MCCOMBIE), T., 227.

$C_{12}H_{10}O_2N_2Br_2$ *p*-Azophenol perbromide (ROBERTSON), T., 1477.

$C_{12}H_{14}O_2NBr$ Diacetyl derivative of 6-bromo-*o*-4-xylidine (CROSSLEY and BARTLETT), T., 1301.

C_{13} Group.

$C_{13}H_{12}O_5$ Ethyl acetocoumaranonecarboxylate (MERRIMAN), T., 1843.

$C_{13}H_{13}O_8$ 3:4:5:7-Tetrahydroxy-2-*m*-*p*-dihydroxyphenyl-1:4-benzopyran (WATSON and SEN), P., 349.

$C_{13}H_{14}O_3$ 6-Phenyl-2-methyl-2:3-dihydro-1:4-pyran-5-carboxylic acid (FARGHER and PERKIN), P., 73.

Xanthohumol (POWER, TUTIN, and ROGERSON), T., 1288; P., 181.

$C_{13}H_{18}O_6$ Diacetyl derivative of 5:5-dibromo-1:1:2:2-tetramethyl*cyclo*pentane-3:4-dione (FRANCIS and WILLSON), T., 2246.

$C_{13}H_{30}O_2$ α-β-γ-Dihydroxy-α-phenyl-γ-ethyl-*n*-pentane (MCKENZIE and MARTIN), T., 118.

Ethyl bornylene-3-carboxylate (BREDT and PERKIN), T., 2198.

$C_{13}H_{22}O_2$ Methyl geranylacetate (FORSTER and CARDWELL), T., 1346.

$C_{13}H_{22}O_5$ Ethyl amyloxyacetylacetoacetate (WEIZMANN, STEPHEN, and AGASHE), T., 1859.

$C_{13}H_{22}O_6$ Monomethyl glucosediacetone (IRVINE and SCOTT), T., 570; P., 70.

$C_{13}H_{22}O_{10}$ Substance, from methylation of cellulose (DENHAM and WOODHOUSE), T., 1738. P., 251.

$C_{13}H_{26}O$ Ethyl *n*-decyl ketone (PICKARD and KENYON), T., 1948.

$C_{13}H_{28}O$ Ethyl-*n*-decylcarbinol, and its resolution and salts (PICKARD and KENYON), T., 1948.

13 III

$C_{13}H_{11}O_6N_3$ 3:5-Dinitro-2-phenoxy-*p*-anisidine (MELDOLA and REVERDIN), T., 1491.

$C_{13}H_{12}ON_2$ Harmine, constitution of (PERKIN and ROBINSON), T., 1973; P., 290.

$C_{13}H_{13}O_4N$ Ethyl phenoxyacetylcyanoacetate, and its copper compound (WEIZMANN, STEPHEN, and AGASHE), T., 1856.

$C_{13}H_{14}ON_2$ Harmaline, constitution of (PERKIN and ROBINSON), T., 1973; P., 290.

$C_{13}H_{15}ON$ 2-Methyldihydroresorcinanilide (GILLING), T., 2034.

$C_{13}H_{15}O_2N_3$ ω-Imides of αα′-dicyano-3- and 4-methyl*cyclo*hexane-1:1-diacetic acids (THORPE and WOOD), T., 1593, 1597.

$C_{13}H_{16}ON_2$ 3-Dimethylaminoacetyl-2-methylindole, and its hydrochloride (SALWAY), T., 355; P., 59.

$C_{13}H_{16}O_4N_2$ Di-imides of 3- and 4-methyl*cyclo*hexane-1:1-dimalonic acids (THORPE and WOOD), T., 1594.

$C_{13}H_{17}O_3N$ Methyl 2:4-xylylsuccinamate (SALWAY), T., 1991; P., 287.

$C_{13}H_{17}O_2N_3$ ω-Imide of α-cyano-α′-carbamyl-4-methyl*cyclo*hexane-1:1-diacetic acid (THORPE and WOOD), T., 1593.

$C_{13}H_{17}O_4N_3$ 4:6-Dinitro-3-piperidino-*o*-xylene (CROSSLEY and PRATT), T., 988.

3:5-Dinitro-4-piperidino-*o*-xylene (CROSSLEY and PRATT), T., 986.

Semicarbazone of ethyl-*p*-methoxyphenylpyruvate (CAIN, SIMONSEN, and SMITH), T., 1036.

$C_{13}H_{17}O_6N$ α-Aminohelicin, hydrochloride of (IRVINE and HYND), T., 54.

$C_{13}H_{18}ON_2$ 2-α-Dimethylamino-γ-hydroxypropylindole, and its salts (SALWAY), T., 360; P., 59.

$C_{13}H_{18}O_2N_4$ ω-Imino-imide of α-cyano-α′-carbamyl-4-methyl*cyclo*hexane-1:1-diacetic acid and its platinichloride (THORPE and WOOD), T., 1592.

Di-imino-di-imides of 3- and 4-methyl*cyclo*hexane-1:1-dimalonic acids and their platinichlorides (THORPE and WOOD), T., 1594.

$C_{13}H_{19}O_3N$ Methyl α-dimethylamino-γ-phenoxybutyrate, hydrochloride of (SALWAY), T., 358.

Acetylbornylene-3-hydroxamic acid (BREDT and PERKIN), T., 2205.

$C_{13}H_{19}O_5N$ α-Aminobenzylglucoside, hydrochloride of (IRVINE and HYND), T., 53.

$C_{13}H_{19}O_6N$ α-Aminosalicin, hydrochloride of (IRVINE and HYND), T., 54.

$C_{13}H_{22}O_4Br_2$ Ethyl αη-dibromoazelate (LE SUEUR), T., 1124.

$C_{13}H_{28}ON_2$ *s*-Di-γ-hexylcarbamide (PYMAN), T., 857.

13 IV

$C_{13}H_5O_2Cl_4Br$ Benzoyl derivative of 2:3:4:6-tetrachloro-5-bromophenol (MCCOMBIE and WARD), T., 2005.

$C_{13}H_5O_2Cl_4I$ Benzoyl derivative of 2:3:4:6-tetrachloro-5-iodophenol (MCCOMBIE and WARD), T., 2004.

$C_{13}H_6O_2Cl_3Br$ Benzoyl derivative of 2:4:6-trichloro-3-bromophenol (MCCOMBIE and WARD), T., 2005.

$C_{13}H_6O_2Cl_3I$ Benzoyl derivative of 2:4:6-trichloro-3-iodophenol (MCCOMBIE and WARD), T., 2003.

$C_{13}H_7O_2Cl_3I_2$ 6-Chloro-2:4-di-iodophenyl benzoate dichloride (KING and MCCOMBIE), T., 231.

$C_{13}H_7O_2Br_2I$ 2:6-Dibromo-4-iodophenyl benzoate (KING and MCCOMBIE), T., 228.

$C_{13}H_8O_2Cl_2I_2$ 2:4-Di-iodophenyl benzoate dichloride (KING and MCCOMBIE), T., 229.

$C_{13}H_9O_4N_2Br$ Benzoyl derivative of bromonitro-*p*-aminophenol (MELDOLA and HOLLELY), T., 183.

$C_{13}H_{10}ONI$ Benzoyl-*m*-iodoaniline (MCCOMBIE and WARD), T., 2000.

$C_{13}H_{10}O_2NBr$ Benzoyl derivative of 2-bromo-4-aminophenol (MELDOLA and HOLLELY), T., 182.

$C_{13}H_{11}O_2N_3S$ 3- and 4-Benzenesulphonyl-3:4-tolylenediazoimides (MORGAN and SCHARFF), P., 374.

$C_{13}H_{14}O_2N_2S$ 3- and 4-Benzenesulphonyl-3:4-tolylenediamines (MORGAN and SCHARFF), P., 374.

13 V

$C_{13}H_7ONCl_3I$ Benzoyl-2:4:6-trichloro-3-iodoaniline (MCCOMBIE and WARD), T., 2001.

$C_{13}H_7O_2Cl_2Br_2I$ 2:6-Dibromo-4-iodophenyl benzoate dichloride (KING and MCCOMBIE), T., 228.

$C_{13}H_8ONCl_2I$ Benzoyl-2:4-dichloro-5-iodoaniline (MCCOMBIE and WARD), T., 2000; P., 283.

$C_{13}H_{11}O_5N_4SNa$ Substance, from sodium methylaniline-ω-sulphonate and diazotised *p*-nitroaniline (POPE and WILLET), T., 1261.

C_{14} Group.

$C_{14}H_{14}$ 2:2′-Dimethyldiphenyl (*ditolyl*), formation of cyclic compounds from derivatives of (KENNER), T., 613; P., 105.

14 II

$C_{14}H_8O_5$ 2:7:?-Trihydroxyphenanthraquinone (MUKERJEE and WATSON), P., 269.

$C_{14}H_{10}O_3$ Benzoic anhydride, rate of hydration of (WILSDON and SIDGWICK), T., 1959; P., 265.

$C_{14}H_{12}O$ Deoxybenzoin, synthesis of unsymmetrical derivatives of (CAIN, SIMONSEN, and SMITH), T., 1035; P., 172.

$C_{14}H_{16}N_2$ ωω′-Diamino-2:2′-dimethyldiphenyl, dihydrochlorides of (KENNER), T., 627.

$C_{14}O_{18}O_6$ ε-*d*- and -*l*-Benzylidene α-methylglucosides (IRVINE and SCOTT), T., 580; P., 71.

Hydroxytriethoxybenzeneglyoxylic acid (*gossypetonic acid*) (PERKIN), T., 656; P., 110.

$C_{14}H_{22}O_8$ Ethyl αδ-diacetoxyadipate (STEPHEN and WEIZMANN), T., 272.

$C_{14}H_{24}O_5$ Ethyl β-amyloxypropionylacetoacetate (WEIZMANN, STEPHEN, and AGASHE), T., 1860.

$C_{14}H_{28}O$ Ethyl *n*-undecyl ketone (PICKARD and KENYON), T., 1950.

$C_{14}H_{30}O$ Ethyl-*n*-undecylcarbinol, and its resolution and salts (PICKARD and KENYON), T., 1951.

14 III

$C_{14}H_6O_4N_4$ 3:3-Dinitro-4:4′-dicyanodiphenyl (CAIN, COULTHARD, and MICKLETHWAIT), T., 2082.

$C_{14}H_7O_6N$ Nitro-2:7-dihydroxyphenanthraquinone (MUKERJEE and WATSON), P., 268.

$C_{14}H_8O_2Cl_4$ Benzoyl derivative of 2:4:5:6-tetrachloro-*m*-cresol (CROWTHER and MCCOMBIE), T., 547.

$C_{14}H_8O_3Br_2$ *o*-Bromobenzoic anhydride, preparation of (DENHAM and WOODHOUSE), T., 1868.

$C_{14}H_8O_7N_2$ *m*-Nitrobenzoic anhydride, preparation of (DENHAM and WOODHOUSE), T., 1868.

$C_{14}H_9O_4N$ Amino-2:7-dihydroxyphenanthraquinone (MUKERJEE and WATSON), P., 268.

$C_{14}H_{10}O_6N_4$ 3:3′- and 3:5′-Dinitrodiformylbenzidines (CAIN, COULTHARD, and MICKLETHWAIT), T., 2077.

$C_{14}H_{11}ON_3$ 3- and 4-Benzoyl-3:4-tolylenediazoimides (MORGAN and MICKLETHWAIT), T., 1402; P., 232.

$C_{14}H_{12}O_2N_2$ Benzildioximes, nickel compounds of (ATACK), T., 1317; P., 195.

$C_{14}H_{13}ON$ α-Keto-β-anilino-α-phenylethane, condensation of, and its homologues, with carbonyl chloride, phenylcarbimide, and phenylthiocarbimide (MCCOMBIE and SCARBOROUGH), T., 56.

Desylamine, derivatives of (MCKENZIE and BARROW), T., 1331; P., 228.

$C_{14}H_{13}O_4N_3$ 3:5-Dinitro-4-anilino-*o*-xylene (CROSSLEY and PRATT), T., 986.

4:6-Dinitro-3-anilino-*o*-xylene (CROSSLEY and PRATT), T., 987.

$C_{14}H_{13}O_5N$ Ethyl phthaliminoacetoacetate, isomeric forms of (WEIZMANN STEPHEN, and AGASHE), T., 1860.

$C_{14}H_{13}NS$ *N*- and *S*-Methylthiobenzanilides, T., 2274; P., 360.

$C_{14}H_{14}ON_2$ 3-Benzoyl-3:4-tolylenediamine (MORGAN and MICKLETHWAIT), T., 1403; P., 232.

$C_{14}H_{14}OSn$ Di-*p*-tolylstannic oxide (SMITH and KIPPING), T., 2050.

Dibenzylstannic oxide (SMITH and KIPPING), T., 2045.

$C_{14}H_{14}Cl_2Sn$ Dichlorodi-*p*-tolylstannane (SMITH and KIPPING), T., 2049.

$C_{14}H_{17}O_4N$ Diacetyl derivative of β-3-amino-*p*-tolylpropionic acid (SALWAY), T., 1904.

$C_{14}H_{19}O_4N$ Ethyl anilinodiacetate (THORPE and WOOD), T., 1607.

$C_{14}H_{21}O_6N$ Ethyl α-cyano*iso*butane-$a\gamma\gamma'$-tricarboxylate (THORPE and WOOD), T., 1581.

$C_{14}H_{22}O_5N_2$ βγ-Dimethyl glucosephenylhydrazone (IRVINE and SCOTT), T., 585.

$C_{14}H_{23}O_8N$ Triacetyl-α-aminoethylglucoside, hydrobromide of (IRVINE and HYND), T., 49.

14 IV

$C_{14}H_6O_4N_4S_2$ 3:3′-Dinitro-4:4′-dithiocyanodiphenyl (CAIN, COULTHARD, and MICKLETHWAIT), T., 2083.

$C_{14}H_8O_4Br_2S_2$ Anhydrides, from sulphur chloride and silver bromobenzoates (DENHAM and WOODHOUSE), T., 1867.

$C_{14}H_8O_8N_2S_2$ Anhydrides, from sulphur chloride and silver nitrobenzoates (DENHAM and WOODHOUSE), T., 1867.

$C_{14}H_{10}O_2N_2Ni$ Nickel compound of γ-benzildioxime (ATACK), T., 1321; P., 195.

C_{15} Group.

$C_{15}H_{12}$ 3:5-Dibenzo-$\Delta^{1:3:5}$-*cyclo*heptatriene, and its picrate (KENNER), T., 625; P., 106.

15 II

$C_{15}H_8O_8$ Gossypitone (PERKIN), T., 657; P., 110.

$C_{15}H_{10}O_4$ Methyl-α- and -β-naphthacoumarincarboxylic acids (DEY), P., 154.

$C_{15}H_{10}O_7$ Quercetin, methylation of (PERKIN), T., 1632; P., 253; colouring matters from (WATSON and SEN), P., 349.

$C_{15}H_{10}O_8$ Gossypetin (PERKIN), T., 650; P., 110.

Quercetagetin (+ $2H_2O$), and its sulphate (PERKIN), T., 209; P., 9.

$C_{15}H_{14}O_5$ 2:2′-Dihydroxy-3:4-dimethoxybenzophenone (SEN-GUPTA and WATSON), P., 270.

Acid, from hydrolysis of humulol (POWER, TUTIN, and ROGERSON), T., 1288.

$C_{15}H_{14}N_6$ 3:5-Dimethylpyrazole-4-azo-β-naphthylamine (MORGAN and REILLY), P. 379.

$C_{15}H_{13}N$ 1-Amino-3:5-dibenzo-$\Delta^{3:5}$-*cyclo*heptadiene and its salts (KENNER), T., 623: P., 105.

$C_{15}H_{16}O_4$ Substance, from hydroxyperezone (REMFRY), T., 1085.

$C_{15}H_{20}O_3$ Perezone (REMFRY), T., 1076; P., 72.

Pipitzol (REMFRY), T., 1079.

$C_{15}H_{22}O_5$ Ethyl dicarboxyglutaconate, action of amino-acid esters on (LEVY), P., 353.

$C_{15}H_{24}O_3$ Tetrahydropipitzol (REMFRY), T., 1083.

$C_{15}H_{24}O_8$ Ethyl αδ-diacetoxy-β-methyladipate (STEPHEN and WEIZMANN), T., 273.

$C_{15}H_{26}O_6$ Ethyl β-amyloxypropionylmalonate (WEIZMANN, STEPHEN, and AGASHE), T., 1860.

$C_{15}H_{30}O$ Ethyl-*n*-dodecyl ketone (PICKARD and KENYON), T., 1952.

$C_{15}H_{32}O$ Ethyl-*n*-dodecylcarbinol, and its resolution and salts (PICKARD and KENYON), T., 1951.

15 III

$C_{15}H_{11}O_2N$ 3:5-Diphenyl-2:3-dihydro-2-oxazolone (McCOMBIE and SCARBOROUGH), T., 58.

$C_{15}H_{11}O_7N$ 6′-Aminoquercetin (WATSON), P., 280.

$C_{15}H_{12}O_2Br_2$ Benzoyl derivative of 4:5-dibromo-3-*o*-xylenol (CROSSLEY and SMITH), T., 991; P., 170.

$C_{15}H_{12}O_3N_2$ Benzenehydrazocarbonylcoumaranone (MERRIMAN), T., 1851; P., 258.

$C_{15}H_{13}ON_4$ 3:5-Dimethylpyrazole-4-azo-β-naphthol (MORGAN and REILLY), P., 379.

$C_{15}H_{13}O_2Br$ Benzoyl derivative of 5-bromo-*o*-3-xylenol (CROSSLEY), T., 2182; P., 352.

Benzoyl derivatives of 5- and 6-bromo-*o*-4-xylenols (CROSSLEY and BARTLETT), T., 1299; P., 217.

$C_{15}H_{14}ON_2$ Benzilmethylhydrazone (FORSTER and CARDWELL), T., 868; P., 150.

$C_{15}H_{15}ON$ α-Keto-β-*m*-toluidino-α-phenylethane (McCOMBIE and SCARBOROUGH), T., 59.

$C_{15}H_{15}O_2N$ Phenylurethane of *d*-phenylmethylcarbinol (McKENZIE and CLOUGH), T., 697.

$C_{15}H_{15}O_4N_3$ 3:5-Dinitro-4-benzylamino-*o*-xylene (CROSSLEY and PRATT), T., 986.

4:6-Dinitro-3-benzylamino-*o*-xylene (CROSSLEY and PRATT), T., 988.

4:6-Dinitro-3-*p*-toluidino-*o*-xylene (CROSSLEY and PRATT), T., 988.

3:5-Dinitro-4-*p*-toluidino-*o*-xylene (CROSSLEY and PRATT), T., 986.

$C_{15}H_{15}O_5N_3$ 4:6-Dinitro-3-*o*- and -*p*-anisidino-*o*-xylenes (CROSSLEY and PRATT), T., 988.

3:5-Dinitro-4-*o*- and -*p*-anisidino-*o*-xylenes (CROSSLEY and PRATT), T., 986.

$C_{15}H_{17}ON$ β-Hydroxy-αβ-diphenylpropylamine (McKENZIE and BARROW), T., 1335.

$C_{15}H_{17}O_7N$ 3:5-Dihydroxy-7-keto-4-dimethylaminophenyl-2-*m*-*p*-dihydroxyphenyl-1:4-benzopyran (WATSON and SEN), P., 349.

$C_{15}H_{18}O_2N_4$ 1-Phenyl-2:3-dimethylpyrazolone-4-azoethyl methyl ketone (MORGAN and REILLY), T., 1499.

Substance, from condensation of methyl acetylmethyl ketone and 1-phenyl-2:3-dimethylpyrazolone-4-diazonium chloride (MORGAN and REILLY), T., 816.

$C_{15}H_{21}O_2N_3$ Eserine (*physostigmine*), constitution of (SALWAY), T., 351, 1988; P., 59, 287.

$C_{15}H_{21}O_3N$ Aminoperezone, zincichloride of (REMFRY), T., 1087.

$C_{15}H_{21}O_6V$ Vanadium teracetylacetonate (MORGAN and MOSS), T., 85.

$C_{15}H_{23}O_6N$ Ethyl α-cyano-ββ-dimethylpropanetricarboxylate (THORPE and WOOD), T., 1583.

$C_{15}H_{32}ON_2$ *s*-Di-δ-heptylcarbamide (PYMAN), T., 856; P., 126.

15 IV

$C_{15}H_9O_3N_2Na$ Benzeneazocarbonylcoumaranone, sodium derivative (MERRIMAN), T., 1852.

$C_{15}H_{12}O_4NBr$ *o*-Nitrobenzoyl derivative of 5-bromo-*o*-3-xylenol (CROSSLEY), T., 2182; P., 352.

o-Nitrobenzoyl derivatives of 5- and 6-bromo-*o*-4-xylenols (CROSSLEY and BARTLETT), T., 1299; P., 217.

15 V

$C_{15}H_{25}O_{12}N_4S_2Co$ *cis*-Sulphonyldiacetatodiethylenediaminecobaltic hydrogen sulphonyldiacetate (PRICE and BRAZIER), P., 272.

C_{16} Group.

$C_{16}H_{10}O_8$ Diphenyl-2:5:2′:5′-tetracarboxylic acid (KENNER and WITHAM), T., 238; P., 10.

$C_{16}H_{11}N$ Indenoquinoline, and its platinichloride (RUHEMANN and LEVY), T., 563.

$C_{16}H_{12}N_2$ 5:5′-Dicyano-2:2′-dimethyldiphenyl (*dicyanoditolyl*) (KENNER and WITHAM), T., 236; P., 10.

$C_{16}H_{14}O_2$ 3:5-Dibenzo-$\Delta^{3:5}$-*cyclo*heptadiene-1-carboxylic acid, and its barium salt (KENNER), T., 621; P., 105.

$C_{16}H_{14}O_4$ 2:2′-Dimethyldiphenyl-5:5′-dicarboxylic acid (KENNER and WITHAM), T., 236; P., 10.

$C_{16}H_{14}O_5$ Mandelic anhydride (DENHAM and WOODHOUSE), T., 1870.

$C_{16}H_{15}N$ Cinnamylidene-*p*-toluidine, and its salts (TINKLER), T., 894; P., 114.

$C_{16}H_{18}O_2$ $\alpha\beta$-Dihydroxy-$\alpha\beta$-di-*o*- and -*p*-tolylethanes (WREN and STILL), T., 1772; P., 262.

$C_{16}H_{18}O_3$ Benzoyl derivative of 2:2:3:3-tetramethyl*bicyclo*[0,1,2]pentan-4-ol-5-one (FRANCIS and WILLSON), T., 2244.

$C_{16}H_{18}O_9$ Anhydride of $\beta\beta$-dimethylpropanetricarboxylic acid (THORPE and WOOD), T., 1584.

$C_{16}H_{20}O_4$ Ethyl-α-benzylglutaconate (THORPE and WOOD), T., 1582.

$C_{16}H_{20}N_2$ Diphenyldimethylethylenediamine, and its picrate (THORPE and WOOD), T., 1609.

$C_{16}H_{22}O_6$ $\epsilon\zeta$-Benzylidene $\beta\gamma$-dimethyl α-methylglucoside (IRVINE and SCOTT), T., 581; P., 71.

$C_{16}H_{24}O_3$ Methylquinole of perezone (REMFRY), T., 1083.

Acid, from oxidation of caulosapogenin (POWER and SALWAY), T., 201.

$C_{16}H_{24}O_6$ Gossypitol tetraethyl ether (PERKIN), T., 654; P., 110.

Quercetagetol tetraethyl ether (PERKIN), T., 216; P., 9.

$C_{16}H_{26}O_3$ Ethyl geranylacetoacetate (FORSTER and CARDWELL), T., 1345.

$C_{16}H_{32}O$ Ethyl *n*-tridecyl ketone (PICKARD and KENYON), T., 1952.

$C_{16}H_{34}O$ Ethyl-*n*-tridecylcarbinol, and its resolution and salts (PICKARD and KENYON), T., 1952.

16 III

$C_{16}H_{10}O_2Br_4$ Tetrabromo-3:5-dibenzo-$\Delta^{3:5}$-*cyclo*heptadiene-1-carboxylic acid (KENNER), T., 623.

$C_{16}H_{10}O_6N_4$ 2:4:5-Trinitro-α-phenylnaphthylamine (RINDL), T., 1915.

$C_{16}H_{12}O_3N_2$ *o*-, *m*-, and *p*-Tolueneazocarbonylcoumaranones, and their metallic derivatives (MERRIMAN), T., 1854.

$C_{16}H_{13}ON$ 2-*o*-Aminobenzylidene-1-hydrindone (RUHEMANN and LEVY), T., 563.

$C_{16}H_{13}OCl$ 3:5-Dibenzo-$\Delta^{3:5}$-*cyclo*heptadiene-1-carboxylic chloride (KENNER), T., 622.

$C_{16}H_{15}O_2N$ 5-Phenyl-3-*o*-, -*m*-, and -*p*-tolyl-2:3-dihydro-2-oxazolones (MCCOMBIE and SCARBOROUGH), T., 59.

$C_{16}H_{14}O_3N_2$ *o*- and *p*-Toluenehydrazocarbonylcoumaranones (MERRIMAN), T., 1854.

$C_{16}H_{14}O_4N_2$ Dibenzoyldiaminoacetic acid, and its metallic salts (HAAS), T., 1304; P., 228.

$C_{16}H_{15}ON$ 3:6-Dibenzo-$\Delta^{3:5}$-*cyclo*heptadiene-1-carboxylamide (KENNER), T., 622.

$C_{16}H_{15}ON_3$ Semicarbazones of phenyl styryl ketone, action of heat on (HEILBRON and WILSON), T., 1504; P., 245.

Substance, and its picrate from phenyl styryl ketone semicarbazones (HEILBRON and WILSON), T., 1511.

$C_{16}H_{16}ON_2$ Hydrazide of 3:5-dibenzo-$\Delta^{3:5}$-*cyclo*heptadiene-1-carboxylic acid (KENNER), T., 623.

$C_{16}H_{16}O_2N_2$ *dl*-1-Hydroxy-2-benzoylhydrazinehydrindene (PEACOCK), T., 672.

$C_{16}H_{16}O_3N_2$ *o*-Nitrophenylacetyl-β-phenylethylamine (KAY and PICTET), T., 958; P., 131.

$C_{16}H_{17}O_4N_3$ 6-Nitro-2-benzoylamino-4-trimethylammonium-1-benzoquinone (MELDOLA and HOLLELY), T., 180.

$C_{16}H_{18}O_3N_4$ 1-Phenyl-2:3-dimethyl pyrazolone-4-azo acetylacetone (MORGAN and REILLY), T., 815; P., 133.

$C_{16}H_{23}O_2N$ Camphorcarboxypiperidide, isomeric changes in (LOWRY and GLOVER), T., 913.

$C_{16}H_{23}O_6N$ Gossypitol tetraethyl ether oxime (PERKIN), T., 655; P., 110.

Quercetagetol tetraethyl ether oxime (PERKIN), T., 216; P., 9.

$C_{16}H_{32}O_2N_2$ α-Propylbutyryl-δ-heptylcarbamide (PYMAN), T., 860.

16 IV

$C_{16}H_{30}OClBr$ α-Bromopalmityl chloride (HOPWOOD), P., 345.

C_{17} Group.

$C_{17}H_{13}N_3$ 2-*p*-Tolyl-1:2-naphthatriazole (MORGAN and MICKLETHWAIT), T., 76.

$C_{17}H_{14}O_4$ 3:5-Dibenzo-$\Delta^{3:5}$-*cyclo*heptadiene-1:1-dicarboxylic acid (KENNER), T., 620.

$C_{17}H_{16}O_2$ Methyl 3:5-dibenzo-$\Delta^{3:5}$-*cyclo*heptadiene-1-carboxylate (KENNER), T., 622.

$C_{17}H_{16}O_4$ Ethyl benzoylmandelate (G. M. and R. ROBINSON), P., 268.

$C_{17}H_{16}N_2$ α-*p*-Toluidino-γ-phenyl*iso*crotononitrile (TINKLER), T., 895; P., 114.

$C_{17}H_{17}N_3$ 1-*p*-Tolyl-1:2:4-triaminonaphthalene (MORGAN and MICKLETHWAIT), T., 74.

$C_{17}H_{18}O_4$ β-Keto-β-4-methoxyphenyl-α-3:4-dimethoxyphenylethane (CAIN, SIMONSEN, and SMITH), T., 1039; P., 172.

β-Keto-α-4-methoxyphenyl-β-3:4-dimethoxyphenylethane (CAIN, SIMONSEN, and SMITH), T., 1037; P., 172.

Humulol (POWER, TUTIN, and ROGERSON), T., 1286; P., 181.

$C_{17}H_{18}O_5$ 2:3:4:2′-Tetramethoxybenzophenone (SEN-GUPTA and WATSON), P., 270.

$C_{17}H_{22}O_4$ Acetylpipitzol (REMFRY), T., 1080.

$C_{17}H_{22}N_2$ Diphenyldimethyltrimethylenediamine, preparation of, and its salts (THORPE and WOOD), T., 1611.

$C_{17}H_{26}O_3$ Ethylquinole of perezone (REMFRY), T., 1083.

17 III

$C_{17}H_{12}O_4N_2$ Acetyl derivative of benzeneazocarbonylcoumaranone (MERRIMAN), T., 1852; P., 258.

$C_{17}H_{13}ON$ 2-Phenyl-5-styryloxazole (FOULDS and ROBINSON), T., 1768; P., 261.

$C_{17}H_{13}O_4N_3$ 2:4-Dinitro-1-*p*-tolyl-α-naphthylamine (MORGAN and MICKLETHWAIT), T., 73.

$C_{17}H_{15}O_2N$ Styryl benzoylaminomethyl ketone (FOULDS and ROBINSON), T., 1769; P., 261.

$C_{17}H_{15}O_5N_3$ *dl*-1-Hydroxy-2-nitropiperonylidenehydrazinohydrindene (PEACOCK), T., 674.

$C_{17}H_{16}O_3N_2$ Ethyl phenylhydrazinocoumaranonecarboxylate (MERRIMAN), T., 1842.

dl-1-Hydroxy-2-piperonylidenehydrazinohydrindene (PEACOCK), T., 674.

$C_{17}H_{16}O_4N_2$ Methyl dibenzoyldiaminoacetate (HAAS), T., 1306.

$C_{17}H_{17}ON$ Acetyldibenzo*cyclo*heptadienylamine (KENNER), T., 625.

$C_{17}H_{17}O_2N$ *apo*Morphine, attempts to synthesise (KAY and PICTET), T., 947; P., 131.

$C_{17}H_{17}O_7I$ 3:5:7-Trihydroxy-2-*mp*-dihydroxyphenyl-4-ethyl-1:4-benzopyran anhydrohydriodide (WATSON and SEN), P., 349.

$C_{17}H_{18}O_2N_2$ *dl*-1-Hydroxy-2-anisylidenehydrazinohydrindene (PEACOCK), T., 673.

$C_{17}H_{18}O_2N_4$ Dihydrazide of 3:5-dibenzo-$\Delta^{3:5}$-*cyclo*heptadiene-1:1-dicarboxylic acid (KENNER), T., 621.

$C_{17}H_{18}O_3N_2$ *dl*-1-Hydroxy-2-vanillylidenehydrazinohydrindene (PEACOCK), T., 674.

$C_{17}H_{19}O_3N$ Piperine, absorption spectra of (PURVIS), T., 2293; absorption spectrum and constitution of (DOBBIE and FOX), T., 1193; P., 180.

$C_{17}H_{19}O_4N$ Oxime of β-keto-β-4-methoxyphenyl-α 3:4-dimethoxyphenylethane (CAIN, SIMONSEN, and SMITH), T., 1039; P., 172.

Oxime of β-keto-α-4-methoxyphenyl-β-3:4-dimethoxyphenylethane (CAIN, SIMONSEN, and SMITH), T., 1037; P., 172.

p-Methoxyphenylaceto-3:4-dimethoxyanilide (CAIN, SIMONSEN, and SMITH), T., 1037.

$C_{17}H_{19}O_5N$ Oxime of 2:3:4:2′-tetramethoxybenzophenone (SEN-GUPTA and WATSON), P., 270.

$C_{17}H_{20}O_2N_2$ Methyl tetrosazone (GILMOUR), P., 108.

$C_{17}H_{20}O_4N_4$ Ethyl 1-phenyl-2:3-dimethylpyrazolone-4-azoacetoacetate (MORGAN and REILLY), T., 816; P., 133.

$C_{17}H_{21}O_4N$ *n*- and *iso*Borneol *p*-nitrobenzoates (HENDERSON and HEILBRON), P., 381.

Cocaine, absorption spectrum and constitution of (DOBBIE and FOX), T., 1193; P., 180.

Hyoscine, absorption spectrum and constitution of (DOBBIE and FOX), T., 1193; P., 180.

$C_{17}H_{23}O_2N$ *l*-Epibornylphenylurethane (BREDT and PERKIN), T., 2223.

$C_{17}H_{23}O_3N$ Anilic acids, from 3- and 4-methyl*cyclo*hexane-1:1-diacetic acids (THORPE and WOOD), T., 1595.

Atropine, absorption spectra and constitution of (DOBBIE and FOX), T., 1193; P., 180.

Hyoscyamine, absorption spectra and constitution of (DOBBIE and FOX), T., 1193; P., 180.

$C_{17}H_{24}ON_2$ Phenylcarbamide from geranylamine (FORSTER and CARDWELL), T., 1344.

$C_{17}H_{29}O_5N$ Triacetyl-α-aminoamylglucoside, hydrobromide of (IRVINE and HYND), T., 50.

$C_{17}H_{33}O_2N$ Sphingosine, preparation and oxidation of (LAPWORTH), T., 1029; P., 154.

17 IV

$C_{17}H_{18}O_2NBr$ α-Bromo-γ-phenoxybutyro-*o*-toluidide (SALWAY), T., 358.

$C_{17}H_{23}O_3NS$ *p*-Toluenesulphonyl-β-aminocamphor (FORSTER and HOWARD), T., 66.

C_{18} Group.

$C_{18}H_{20}$ 1:4-Diphenyl*cyclo*hexane (THORPE and WOOD), T., 1573.

18 II

$C_{18}H_{14}O_5$ Ethyl benzocoumaranonecarboxylate (MERRIMAN), T., 1843.

$C_{18}H_{16}O_3$ Ethyl 3:5-dibenzo-$\Delta^{3:5}$-*cyclo*heptadien-1-one-2-carboxylate, and its copper salt (KENNER), T., 626; P., 106.

$C_{18}H_{18}O_2$ Ethyl 3:5-dibenzo-$\Delta^{3:5}$-*cyclo*heptadiene-1-carboxylate (KENNER), T., 622.

$C_{18}H_{18}O_4$ Dimethyl 2:2′-ditolyl-5:5′-dicarboxylate (KENNER and WITHAM), T., 237; P., 10.

$C_{18}H_{24}N_2$ Diphenyldiethylethylenediamine, and its dipicrate (THORPE and WOOD), T., 1608.

$C_{18}H_{28}O_3$ Propylquinole of perezone (REMFRY), T., 1084.

$C_{18}H_{28}O_8$ Ethyl dicarbethoxydimethyl*cyclo*propane, structure of lactones from (PERKIN and THORPE), T., 1760; P., 259.

$C_{18}H_{32}O_2$ Chaulmoogric acid, in the seeds of *Oncoba echinata* (GOULDING and AKERS), P., 197.

$C_{18}H_{36}O$ Ethyl *n*-pentadecyl ketone (PICKARD and KENYON), T., 1953.

$C_{18}H_{38}O$ Ethyl-*n*-pentadecylcarbinol, and its resolution and salts (PICKARD and KENYON) T., 1953.

18 III

$C_{18}H_{11}O_8N$ Nitro-2:7-diacetoxyphenanthraquinone (MUKERJEE and WATSON), P., 268.

$C_{18}H_{13}O_3N_5$ *p*-Nitrobenzeneazobenzeneazophenol (POPE and WILLETT), T., 1261; P., 191.

$C_{18}H_{14}O_4N_2$ Acetyl derivatives of *o*-, *m*-, and *p*-tolueneazocarbonylcoumarones (MERRIMAN), T., 1854.

2:7-Diacetylaminophenanthraquinone (MUKERJEE and WATSON), P., 269.

$C_{18}H_{15}O_2N$ 3-Hydroxy-2:5-diphenyl-6-methyl-1:2-dihydropyridone (THORPE and WOOD), T., 1577.

$C_{18}H_{17}O_3N$ Semianilide of β-phenyl-α-methylglutaconic acid (THORPE and WOOD), T., 1577.

$C_{18}H_{18}ON_2$ *dl*-1-Hydroxy-2-cinnamylidenehydrazinohydrindene (PEACOCK), T., 674.

$C_{18}H_{18}O_2N_2$ 1:3-Dibenzoylhexahydropyrimidine (TITHERLEY and BRANCH), T., 339; P., 29.

$C_{18}H_{18}O_4N_2$ Ethyl dibenzoyldiaminoacetate (HAAS), T., 1306.

Substance, from dehydration of 2-nitrohomoveratroyl-β-phenylethylamine (KAY and PICTET), T., 957; P., 131.

$C_{18}H_{19}ON$ Benzoyl derivatives of 4:6- and -4:7-dimethyl-1:2:3:4-tetrahydroquinolines (EWINS and KING), T., 110.

Benzoyl derivative of 4:8-dimethyl-1:2:3:4-tetrahydroquinoline (EWINS and KING), T., 109.

Benzoyl derivative of α-cytisolidine (EWINS), T., 104.

$C_{18}H_{19}O_2N$ 3:5-Dibenzo-$\Delta^{3:5}$-*cyclo*heptadienylurethane (KENNER), T., 624; P., 105.

$C_{18}H_{20}O_4Sn$ Substance, from the action of benzyl acetate on dibenzylstannic oxide (SMITH and KIPPING), T., 2048.

$C_{18}H_{20}O_5N_2$ 2-Nitrohomoveratroyl-β-phenylethylamine (KAY and PICTET), T., 957; P., 131.

$C_{18}H_{21}O_3N$ Benzoylbornylene-3-hydroxamic acid (BREDT and PERKIN), T., 2205.

$C_{18}H_{22}O_3N_2$ Methyl tetrosephenylbenzylhydrazone (GILMOUR), P., 363.
$C_{18}H_{36}O_3N_2$ α-Aminopalmitylglycine (HOPWOOD), P., 345.

18 IV

$C_{18}H_{13}O_2N_2Cl$ 5-*p*-Chlorobenzeneazo-2:2′-diphenol (ROBERTSON and BRADY), T., 1483.
$C_{18}H_{34}O_3NBr$ α-Bromopalmitylglycine (HOPWOOD), P., 345.

18 V

$C_{18}H_{10}O_3N_2ClBr_3$ 5-*p*-Chloro-3:3′:5′-tribromobenzeneazo-2:2′-diphenol (ROBERTSON and BRADY), T., 1483.

C_{19} Group.

$C_{19}H_{12}O_3$ Resoreinol-benzein (*3-hydroxy-9-phenylfluorone*) (POPE), P., 378.
$C_{19}H_{14}O_4$ 3:4-Diphenyl-$\Delta^{3:4}$-*cyclo*pentenone-2-oxalic acid (RUHEMANN and LEVY), T., 557.
$C_{19}H_{16}O_4$ Cotarnonideneacetophenone (*phenyl 2-methoxy-3:4-methylenedioxy-6-vinylstyryl ketone*) (HOPE and ROBINSON), T., 372.
$C_{19}H_{16}O_5$ 2-Methoxy-3:4-methylenedioxy-6-vinyl-α-phenylcinnamic acid (HOPE and ROBINSON), T., 368.
$C_{19}H_{24}O_6$ Ethyl α-carbethoxy-β-phenyl-α-methylglutaconate (THORPE and WOOD), T., 1574.
$C_{19}H_{26}N_2$ Diphenyldiethyltrimethylenediamine, and its picrate (THORPE and WOOD), T., 1610.
s-Diphenylheptamethylenediamine, and its hydrochloride (LE SUEUR), T., 1125.
$C_{19}H_{38}O$ Homogeranylphenylmethylcarbinol (FORSTER and CARDWELL), T., 1346.

19 III

$C_{19}H_{13}O_2N$ 5-Phenyl-3-β-naphthyl-2:3-dihydro-2-oxazolone (MCCOMBIE and SCARBOROUGH), T., 60.
$C_{19}H_{13}O_2Br_3$ Ketohydrindylmethyleneketobromohydrindene dibromide (RUHEMANN and LEVY), T., 555; P., 74.
$C_{19}H_{14}O_2N_4$ *p*-Nitrobenzylideneaminoazobenzene (POPE and WILLETT), T., 1259.
$C_{19}H_{15}ON_3$ *p*-Hydroxybenzylideneaminoazobenzene (POPE and WILLETT), T., 1258.
$C_{19}H_{15}O_2N_3$ 2:4-Dihydroxybenzylideneaminoazobenzene (POPE and WILLETT), T., 1259.
$C_{19}H_{17}ON_3$ Substance, from 1-*p*-tolyl-1:2:4-triaminonaphthalene and nitrosyl sulphate (MORGAN and MICKLETHWAIT), T., 76.
$C_{19}H_{17}O_3Br$ Benzoyl derivative of 1-bromo-2:2:3:3-tetramethyl*bicyclo*[0, 1, 2,] pentan-4-ol-5-one (FRANCIS and WILLSON), T., 2242.
$C_{19}H_{15}O_4N_4$ 6-Nitro-2-β-naphtholazo-4-trimethylammonium-1-benzoquinone (+ H_2O), and its chloride (MELDOLA and HOLLELY), T., 189.
$C_{19}H_{23}O_9N$ Triacetyl-α-amino-*o*-aldehydophenylglucoside, hydrobromide of (IRVINE and HYND), T., 51.
$C_{19}H_{24}O_3N_2$ α-Dimethylamino-γ-phenoxybutyro-*o*-toluidide, and its salts (SALWAY), T., 358.
$C_{19}H_{24}O_4N_4$ ζ-Monomethylglucosazone (IRVINE and SCOTT), T., 573.
$C_{19}H_{22}O_9N$ Triacetyl-α-aminobenzylglucoside, hydrobromide of (IRVINE and HYND), T., 51.

C_{20} Group.

$C_{20}H_{12}O_7$ Hydroxyquinol-phthalein anhydride (GHOSH and WATSON), P., 9.

$C_{20}H_{14}O_4$ Phenolphthalein, constitution of, and its alkali salts (FORT and BARRETT), P., 270.

$C_{20}H_{18}O_4$ Tetramethyl diphenyl-2:5:2′:5′-tetracarboxylate (KENNER and WITHAM), T., 237; P., 10.

$C_{20}H_{20}O_7$ Methylquercetin tetramethyl ether (PERKIN), T., 1635; P., 253.

$C_{20}H_{20}O_8$ Quercetagetin pentamethyl ether (PERKIN), T., 213; P., 9.

$C_{20}H_{22}O_4$ Diacetyl derivatives of $\alpha\beta$-dihydroxy-$\alpha\beta$-di-*o*- and -*p*-tolylethanes (WREN and STILL), T., 1772; P., 262.

Diethyl 2:2′-dimethyldiphenyl-5:5′-dicarboxylate (KENNER and WITHAM), T., 237; P., 10.

Diethyl 2:2′-dimethyldiphenyl-$\omega\omega'$-dicarboxylate (KENNER), T., 625; P., 106.

$C_{20}H_{28}N_2$ *s*-Diphenyloctamethylenediamine, and its hydrochloride (LE SUEUR), T., 1121.

20 III

$C_{20}H_{10}O_8N_4$ 2:4:2′:4′-Tetranitro-$\alpha\alpha$-dinaphthyl (RINDL), T., 1917.

$C_{20}H_{12}OS$ Naphthathioxin, constitution of (NOLAN and SMILES), T., 901; P., 151.

*iso*Naphthathioxin (NOLAN and SMILES), T., 347, 903; P., 53, 151.

$C_{20}H_{12}O_2S$ *iso*Naphthathioxin oxide (NOLAN and SMILES), T., 910.

$C_{20}H_{12}O_3S$ Naphthathioxin dioxide (NOLAN and SMILES), T., 908.

*iso*Naphthathioxin dioxide (NOLAN and SMILES), T., 912.

$C_{20}H_{12}O_6N_4$ 3:3′-Dinitrophthalylbenzidine (CAIN, COULTHARD, and MICKLETHWAIT), T., 2078.

$C_{20}H_{14}O_2S$ β-Naphthol sulphides, constitution of (NOLAN and SMILES), P., 197.

$C_{20}H_{14}O_8N_4$ 3:3′- and 3:5′-Dinitro-4:4′-disucciniminodiphenyl (CAIN, COULTHARD, and MICKLETHWAIT), T., 2078.

$C_{20}H_{15}O_4N_3$ Diphenylcarbamyl-*o*-, -*m*-, and -*p*-nitrobenz*syn*aldoximes (BRADY and DUNN), T., 1617.

$C_{20}H_{16}O_2N_2$ Diphenylcarbamylbenz*syn*aldoxime (BRADY and DUNN), T., 1616.

$C_{20}H_{17}ON_3$ *p*-Methoxybenzylideneaminoazobenzene (POPE and WILLETT), T., 1259.

$C_{20}N_{18}O_5N_2$ Anhydrocotarnineisatin (HOPE and ROBINSON), T., 376.

$C_{20}H_{18}O_5V$ Vanadium oxybisbenzoylacetonate (MORGAN and MOSS), T., 87.

$C_{20}H_{19}ON$ β-Hydroxy-$\alpha\beta\beta$-triphenylethylamine (MCKENZIE and BARROW), T., 1336.

$C_{20}H_{20}O_3N_2$ Anil-anilide from $\beta\beta$-dimethylpropanetricarboxylic acid (THORPE and WOOD), T., 1585.

Anhydrocotarninephenylacetonitrile (HOPE and ROBINSON), T., 366.

$C_{20}H_{21}O_4N$ Anhydrocotarnineacetophenone, and its salts (HOPE and ROBINSON), T., 369; P., 63.

$C_{20}H_{22}O_2N_2$ 1:4-Dibenzoyl-2- and -3-dimethylpiperazines, absorption spectra of (PURVIS), T., 2287.

$C_{20}H_{25}ON$ Tetrahydroquinolino-*d*- and -*dl*-methylenecamphors (POPE and READ), T., 1529.

$C_{20}H_{25}O_2N$ *d*- and *l*-Hydroxyhydrindamino-*d*-methylenecamphor (POPE and READ), T., 447.

20 IV

$C_{20}H_8O_6N_4Cl_4$ (3:4:5:6-Tetrachloro)phthalyl-3:3′- and -3:5′-dinitrobenzidines (CAIN, COULTHARD, and MICKLETHWAIT), T., 2079.

$C_{20}H_{10}OCl_2S$ Dichloronaphthathioxin (NOLAN and SMILES), T., 907.

$C_{20}H_{10}OBr_2S$ Dibromonaphthathioxin (NOLAN and SMILES), T., 908.

Dibromo*iso*naphthathioxin (NOLAN and SMILES), T., 349; P., 53.

C_{21} Group.

$C_{21}H_{15}N_3$ Cyaphenine, constitution of (MACKENZIE), P., 175.

$C_{21}H_{18}O_4$ Ethyl 3:4-diphenyl-$\Delta^{3:4}$-*cyclo*pentenone-2-oxalate (RUHEMANN and LEVY), T., 557.

$C_{21}H_{20}O_2$ $\alpha\beta$- and $\alpha\gamma$-Dihydroxy-$\alpha\alpha\gamma$-triphenylpropanes, optically active (MCKENZIE and MARTIN), T., 113.

$C_{21}H_{22}O_4$ Diethyl 3:5-dibenzo-$\Delta^{3:5}$-*cyclo*heptadiene-1:1-dicarboxylate (KENNER), T., 621.

$C_{21}H_{22}O_7$ Methylquercetin pentamethyl ether (PERKIN), T., 1634; P., 253.

$C_{21}H_{22}O_8$ Gossypetin hexamethyl ether (PERKIN), T., 653; P., 110.

Quercetagetin hexamethyl ether (PERKIN), T., 214; P., 9.

$C_{21}H_{33}N$ *d*-, *n*-, and *neo*-Bornylamino-*d*-methylenecamphor (POPE and READ), T., 456.

21 III

$C_{21}H_{16}ON_2$ 1:3:4-Triphenyl-2:3-dihydro-2-glyoxaline, and its picrate (MCCOMBIE and SCARBOROUGH), T., 60.

$C_{21}H_{16}N_2S$ 1:3:4-Triphenyl-2:3-dihydro-2-glyoxalthione (MCCOMBIE and SCARBOROUGH), T., 62.

$C_{21}H_{17}O_2N$ Benzodesylamide (MCKENZIE and BARROW), T., 1334.

3:4:5-Triphenyl-2:3:4:5-tetrahydro-2-oxazolone (CROWTHER and MCCOMBIE), T., 29.

$C_{21}H_{19}ON_5$ 1-Phenyl-2:3-dimethylpyrazolone-4-azo-β-naphthylamine, and its hydrochloride (MORGAN and REILLY), T., 814; P., 133.

$C_{21}H_{19}O_2N$ 4:5-Diphenyl-3-β-naphthyl-2:3:4:5-tetrahydro-2-oxazolone (CROWTHER and MCCOMBIE), T., 31.

$C_{21}H_{19}O_5N$ Anhydrocotarnine-1:3-diketohydrindene (HOPE and ROBINSON), T., 374.

$C_{21}H_{20}O_3N_4$ 1-Phenyl-2:3-dimethylpyrazolone-4-azobenzoylacetone (MORGAN and REILLY), T., 1496.

$C_{21}H_{21}ON$ α-Hydroxy-β-*m*-toluidino-$\alpha\beta$-diphenylethane (CROWTHER and MCCOMBIE), T., 29.

$C_{21}H_{21}O_3N$ Anhydrocotarnineindene, and its salts (HOPE and ROBINSON), T., 375.

$C_{21}H_{21}O_4N$ Anhydrocotarnine-1-hydrindone (HOPE and ROBINSON), T., 374.

$C_{21}H_{22}O_3N_2$ Anhydrocotarnine-α-methylindole (HOPE and ROBINSON), T., 376.

Methylanhydrocotarninephenylacetonitrile, and its picrate (HOPE and ROBINSON), T., 366.

$C_{21}H_{23}O_4N$ Anhydromethylcanadines, and their salts (PYMAN), T., 833; P., 125.

Base, from *l*-canadine methohaloids (JOWETT and PYMAN), T., 299

$C_{21}H_{23}O_5N$ γ-Homochelidonine ($+\frac{1}{2}$ EtOH) (JOWETT and PYMAN), T., 299; P., 26.

$C_{21}H_{26}O_4N_2$ $\alpha\eta$-Dianilinoazelaic acid (LE SUEUR), T., 1124.

$C_{21}H_{27}ON$ Tetrahydroquinaldinomethylenecamphors, stereoisomeric (POPE and READ), T., 1515; P., 247.

$C_{21}H_{27}O_6N$ Ethyl α-cyano-γ-benzyl*iso*butane-αγγ′-tricarboxylate (THORPE and WOOD), T., 1582.

$C_{21}H_{33}ON$ *d*-α-Camphylamino-*d*- and -*l*-methylenecamphor (POPE and READ), T., 453.

21 IV

$C_{21}H_{15}O_3N_4Na$ Benzeneazocarbonylcoumaranonephenylhydrazone, sodium derivative (MERRIMAN), T., 1853.

$C_{21}H_{19}O_4N_5S$ 1-Phenyl-2:3-dimethylpyrazolone-4(-1′)-azo-β-naphthylamine-6′-sulphonic acid (MORGAN and REILLY), T., 1501.

$C_{21}H_{20}O_4NCl$ 2:3:4:2′-Tetrahydroxy-4″-dimethylaminotriphenylcarbinol anhydro-hydrochloride (SEN-GUPTA and WATSON), P., 269.

$C_{21}H_{24}O_4NCl$ Tetrahydroberberine methochlorides, and the constitution of anhydro bases derived from them (PYMAN), T., 825; P., 125.

l-α- and -β-Canadine methochlorides (JOWETT and PYMAN), T., 296; P., 26.

$C_{21}H_{24}O_4NI$ Tetrahydroberberine methiodides, and the constitution of anhydrobases derived from them (PYMAN), T., 825; P., 125.

l-α- and -β-Canadine methiodides (JOWETT and PYMAN), T., 296; P., 26.

C_{22} Group.

$C_{22}H_{24}O_3$ Substance, from condensation of phenol and camphorquinone (SEN-GUPTA and DEY), P., 155.

$C_{22}H_{24}O_4$ Benzoylpipitzol (REMFRY), T., 1081.

$C_{22}H_{44}O_2$ Methyl cluytinate (POWER, TUTIN, and ROGERSON), T., 1284.

22 III

$C_{22}H_{14}O_4S_2$ Anhydride, from sulphur chloride and silver α-naphthoate (DENHAM and WOODHOUSE), T., 1866.

$C_{22}H_{16}O_2N_2$ 5-Naphthaleneazo-2:2′-diphenol (ROBERTSON and BRADY), T., 1484.

$C_{22}H_{16}O_8N_2$ αδ-Diphthaliminoadipic acid (STEPHEN and WEIZMANN), T., 273.

$C_{22}H_{18}ON_2$ 3:4-Diphenyl-1-*o*-, -*m*-, and -*p*-tolyl-2:3-dihydro-2-glyoxalones, and their picrates (MCCOMBIE and SCARBOROUGH), T., 61.

$C_{22}H_{18}O_2S$ β-Naphthol sulphide dimethyl ether (NOLAN and SMILES), T., 345.

$C_{22}H_{18}N_2S$ 3:4-Diphenyl-1-*o*-, -*m*-, and -*p*-tolyl-2:3-dihydro-2-glyoxalthiones (MCCOMBIE and SCARBOROUGH), T., 62.

$C_{22}H_{19}ON_3$ Phenylsemicarbazones of phenyl styryl ketone (HEILBRON and WILSON), T., 1512.

$C_{22}H_{20}O_{10}N_2$ αδ-Diphthalaminoadipic acid (+ $2H_2O$) (STEPHEN and WEIZMANN), T., 274.

$C_{22}H_{26}O_{11}N_2$ Substance, and its silver salt, from the action of nitric acid on aconitine (BRADY), T., 1825.

$C_{22}H_{28}O_4N_2$ αθ-Dianilinosebacic acid (LE SUEUR), T., 1120.

$C_{22}H_{32}O_2N_2$ Di-*d*-bornylene-3-carboxylic hydrazide (BREDT and PERKIN), T., 2201.

22 IV

$C_{22}H_{22}O_9N_8Cr_2$ 1-Phenyl-2:3-dimethylpyrazolone-4-diazonium dichromate, and its hydrochloride (MORGAN and REILLY), T., 812.

$C_{22}H_{23}O_2N_8Cl_3$ 1-Phenyl-2:3-dimethylpyrazolone-4-diazonium chloride, and its platinichloride (MORGAN and REILLY), T., 812; P., 133.

C_{23} Group.

$C_{22}H_{14}O_2$ Phenylenedibenzo*spiro*pyran (RUHEMANN and LEVY), T., 562.

$C_{23}H_{17}N_3$ 2:3-Diphenyl-2:3-dihydro-1:3:4-naphtha*iso*triazine, resolution of, into its optically active components and preparation of its salts (POPE and TAYLOR), T., 1763; P., 259.

$C_{23}H_{18}O$ Anhydride of β-1:1-dihydroxydinaphthylpropane (SEN-GUPTA), P., 382.

$C_{23}H_{24}O_2$ *d*-βγ- and *l*-βδ-Dihydroxy-αδ-diphenyl-β-benzyl-*n*-butanes (MCKENZIE and MARTIN), T., 116.

$C_{23}H_{24}O_4$ Phenylhydrazone of 2:3:4:2′-tetramethoxybenzophenone (SEN-GUPTA and WATSON), P., 270.

$C_{23}H_{32}O_{15}$ Acetyl derivative from methylated cellulose (DENHAM and WOODHOUSE), T., 1741.

$C_{23}H_{46}O_2$ Acid, from oxidation of oleanone (TUTIN and NAUNTON), T., 2059.

23 III

$C_{23}H_{18}O_3N_4$ Acetyl derivative of benzeneazocarbonylcoumaranonephenylhydrazone (MERRIMAN), T., 1853.

$C_{23}H_{20}O_3N_4$ *o*- and *p*-Tolueneazocarbonylcoumaranone-*p*-tolylhydrazones (MERRIMAN), T., 1855.

$C_{23}H_{23}ON_5$ 1-Phenyl-2:3-dimethylpyrazolone-4-azoethyl-β-naphthylamine, and its hydrochloride (MORGAN and REILLY), T., 1500.

$C_{23}H_{23}O_3N$ α-Ethylcarbonato-β-anilino-αβ-diphenylethane (CROWTHER and MCCOMBIE), T., 29.

$C_{23}H_{26}O_4N_2$ Brucine, salt of, with methyl tetronic acid (GILMOUR), P., 363.

$C_{23}H_{27}O_5N$ Ethyl anhydrocotarninephenylacetate, and its salts (HOPE and ROBINSON), T., 367.

$C_{23}H_{30}O_2N_2$ *s*-Diacetyldiphenylheptamethylenediamine (LE SUEUR), T., 1126.

$C_{23}H_{30}O_7N_2$ α-Aminomorphineglucoside, and its hydrochloride (IRVINE and HYND) T., 55.

C_{24} Group.

$C_{24}H_{16}O_3$ Substance, from oxidation of β-1:1-dihydroxydinaphthylpropane (SEN-GUPTA), P., 382.

$C_{24}H_{16}O_4$ Substance, from oxidation of β-1:1-dihydroxydinaphthylpropane (SEN-GUPTA), P., 382.

$C_{24}H_{18}O_3$ Dihydroxy-derivative from substance, $C_{24}H_{16}O_4$ (SEN-GUPTA), P., 382.

$C_{24}H_{20}O$ Anhydride of 1:1-dihydroxymethylethyl-αα-dinaphthylmethane (SEN-GUPTA), P., 28.

24 III

$C_{24}H_{14}O_{10}N_4$ Tetranitro-4″:4‴-dihydroxybenzerythrene (CAIN, COULTHARD, and MICKLETHWAIT), T., 2084.

$C_{24}H_{16}O_6N_6$ 3:3′- and 3:5′-Dinitrodiphenyl-4:4′-bisazophenols (CAIN, COULTHARD, and MICKLETHWAIT), T., 2079.

$C_{24}H_{18}O_2N_4$ 5:5′-Bisbenzeneazo-2:2′-diphenol ($+\frac{1}{2}H_2O$), and its hydrochloride (ROBERTSON and BRADY), T., 1482; P., 248.

$C_{24}H_{18}O_4N_4$ 5:5′-Bis-*p*-hydroxybenzeneazo-2:2′-diphenol (ROBERTSON and BRADY), T., 1484.

$C_{24}H_{18}O_4S$ Diacetyl derivative of unstable β-naphthol sulphide (NOLAN and SMILES), T., 347.

$C_{24}H_{19}O_2N$ 4:5-Diphenyl-3-*m*- and -*p*-tolyl-2:3:4:5-tetrahydro-2-oxazolones (CROWTHER and MCCOMBIE), T., 30.

$C_{24}H_{31}ON$ β-Hydroxy-αβ-diphenyl-β-naphthylethylamine (McKenzie and Barrow), T., 1335.

α-Hydroxy-β-2-naphthylamino-αβ-diphenylethane (Crowther and McCombie), T., 30.

$C_{24}H_{29}O_9N$ Substance, from oxidation of aconitine (Brady), T., 1824.

$C_{24}H_{32}O_2N_2$ *s*-Diacetyldiphenyloctamethylenediamine (Le Sueur), T., 1121.

$C_{24}H_{41}O_2N$ α-Anilinostearic acid, resolution of (Le Sueur), T., 2108; P., 306.

24 IV

$C_{24}H_{12}O_8N_4Cl_2$ 4″:4‴-Dichlorotetranitrobenzerythrene (Cain, Coulthard, and Micklethwait), T., 2080.

$C_{24}H_{12}O_8N_4Br_2$ 4″:4‴-Dibromotetranitrobenzerythrene (Cain, Coulthard, and Micklethwait), T., 2082.

$C_{24}H_{16}O_2N_4Cl_2$ 5:5′-Bis-*o*- and -*p*-chlorobenzeneazo-2:2′-diphenol (Robertson and Brady), T., 1483.

$C_{24}H_{16}O_2N_4Br_2$ 3:3′-Dibromo-5:5′-bisbenzeneazo-2:2′-diphenol (Robertson and Brady, T., 1482.

C_{25} Group.

$C_{25}H_{22}O$ Anhydride of γ-1:1-dihydroxydinaphthylpentane (Sen-Gupta), P., 382.

Substance, from methyl propyl ketone or diethyl ketone and α-naphthol (Sen-Gupta), P., 30.

25 III

$C_{25}H_{18}ON_2$ 3:4-Diphenyl-1-β-naphthyl-2:3-dihydro-2-glyoxalone, and its picrate (McCombie and Scarborough), T., 62.

$C_{25}H_{20}O_2N_2$ Phenyl-β-naphthylbenzoylmethylcarbamide (McCombie and Scarborough), T., 61.

$C_{25}H_{23}O_3N$ Anhydrocotarninefluorene, and its picrate (Hope and Robinson), T., 375.

C_{26} Group.

$C_{26}H_{12}O_8N_6$ 4″:4‴-Dicyanotetranitrobenzerythrene (Cain, Couthard, and Micklethwait), T., 2082.

$C_{26}H_{16}O_4N_4$ Phenanthraquinone-2:7-bisazophenol (Mukerjee and Watson), P., 269.

$C_{26}H_{18}O_6N_4$ Dibenzoyl-3:3′- and -3:5′-dinitrobenzidines (Cain, Coulthard, and Micklethwait), T., 2077.

$C_{26}H_{22}O_2N_4$ 5:5′-Bis-*p*-tolueneazo-2:2′-diphenol(+ $\frac{1}{2}H_2O$) (Robertson and Brady), T., 1482.

$C_{26}H_{24}O_8N_2$ Ethyl αδ-diphthaliminoadipate (Stephen and Weizmann), T., 273.

$C_{26}H_{27}O_3N_3$ Trianilide from ββ-dimethylpropanetricarboxylic acid (Thorpe and Wood), T., 1585.

26 IV

$C_{26}H_{12}O_8N_6S_2$ Tetranitro-4″:4‴-dithiocyanobenzerythrene (Cain, Coulthard, and Micklethwait), T., 2083.

C_{27} Group.

$C_{27}H_{22}O$ Substance, from benzophenone and α-naphthol (SEN-GUPTA), P., 30.

$C_{27}H_{30}O_{16}$ Kaempferin (+ $6H_2O$) (TUTIN), T., 2012; P., 278.

$C_{27}H_{34}O_8$ Gossypetin hexaethyl ether (PERKIN), T., 654; P., 110.
Quercetagetin hexaethyl ether (PERKIN), T., 214; P., 9.

27 III

$C_{27}H_{22}ON_4$ Substance, and its hydrochloride from diazodeoxybenzoin and magnesium phenyl bromide (FORSTER and CARDWELL), T., 868; P., 150.

$C_{27}H_{24}O_2N_2$ 5-*p*-Diethylaminoanilo-3:4-diphenyl-$\Delta^{3:4}$-*cyclo*pentene-1:2-dione, and its platinichloride (RUHEMANN and LEVY), T., 561.

$C_{27}H_{25}O_5N$ Benzoylanhydrocotarnineacetophenone (HOPE and ROBINSON), T., 369.

$C_{27}H_{25}O_6N$ Benzoylanhydrocotarninephenylacetic acid (HOPE and ROBINSON), T., 365.

$C_{27}H_{37}O_7I$ 3:5:7-Triethoxy-2-*mp*-diethoxyphenyl-4-ethyl-1:4-benzopyran anhydrohydriodide (WATSON and SEN), P., 349.

C_{28} Group.

$C_{28}H_{20}O$ Substance, from acetophenone and α-naphthol (SEN-GUPTA), P., 30.

$C_{28}H_{20}O_{11}$ Acetyl derivative of hydroxyquinolphthalein anhydride (GHOSH and WATSON), P., 10.

$C_{28}H_{32}O_8$ Substance, from condensation of ωω′-dibromo-2:2′-ditolyl and tetraethyl ethanetetracarboxylate (KENNER), T., 626.

$C_{28}H_{32}N_2$ *s*-Di-1- and -2-naphthyloctamethylenediamines, and hydrochloride of the latter (LE SUEUR), T., 1122.

28 III

$C_{28}H_{14}O_8N_4$ 4:4′-Diphthalimino-3:5′-dinitrodiphenyl (CAIN, COULTHARD, and MICKLETHWAIT), T., 2078.

$C_{28}H_{38}O_4N_2$ Cephæline, hydrochlorides from (CARR and PYMAN), P., 227.

28 IV

$C_{28}H_{12}O_8N_4Cl_4$ 4:4′-Di(3:6-dichloro)-phthalimino-3:3′- and -3:5′-dinitrodiphenyl (CAIN, COULTHARD, and MICKLETHWAIT), T., 2079.

C_{29} Group.

$C_{29}H_{42}O_4$ Substances, from oxidation of oleanone with chromic acid (TUTIN and NAUNTON), T., 2058; P., 301.

$C_{29}H_{46}O_4$ Oleanone (TUTIN and NAUNTON), T., 2054; P., 301.

$C_{29}H_{50}O_5$ Ipuranol, constitution of (POWER and SALWAY), T., 399; P., 63.

$C_{29}H_{50}O_{29}$ Substance, from methylation of cellulose (DENHAM and WOODHOUSE), T., 1739; P., 251.

29 III

$C_{29}H_{24}O_2N_4$ Acetyl derivative of substance, from diazodeoxybenzoin and magnesium phenyl bromide (FORSTER and CARDWELL), T., 869.

$C_{29}H_{32}O_4N_2$ Rubremetine, hydrochloride of (CARR and PYMAN), P., 227.

C_{30} Group.

$C_{30}H_{20}O_4N_2$ ωω′-Diphthalimino-2:2′-dimethyldiphenyl (KENNER), T., 627.

$C_{30}H_{27}O_6V$ Vanadium terbenzoylacetonate (MORGAN and MOSS), T., 87.

$C_{30}H_{32}O_4N_2$ αθ-Di-1- and -2-naphthylaminosebacic acids (LE SUEUR), T., 1122.

C_{31} Group.

$C_{31}H_{18}O_2$ Phenylenedi-β-naphtha*spiro*pyran (RUHEMANN and LEVY), T., 563.

$C_{31}H_{20}O_2$ 3:3′-Diphenylacetylenedibenzo*spiro*pyran (RUHEMANN and LEVY), T., 559.

$C_{31}H_{26}O$ 3:4-Diphenyl-2:5-dibenzylidene-$\Delta^{3:4}$-*cyclo*pentenone (RUHEMANN and LEVY), T., 557.

$C_{31}H_{44}O_5$ Acetyl derivatives of substances $C_{29}H_{42}O_4$ (TUTIN and NAUNTON), T., 2058; P., 301.

$C_{31}H_{48}O_5$ Acetyloleanone (TUTIN and NAUNTON), T., 2055; P., 301.

31 III

$C_{31}H_{29}O_5N_2$ 3:4-Diphenyl-2:5-di-*p*-nitrobenzylidene-$\Delta^{3:4}$-*cyclo*pentenone (RUHEMANN and LEVY), T., 558.

31 IV

$C_{31}H_{34}O_4N_2S_2$ *s*-Dibenzenesulphonyldiphenylheptamethylenediamine (LE SUEUR), T., 1126.

C_{32} Group.

$C_{32}H_{20}O_6N_6$ 3:3′- and 3:5′-Dinitrodiphenyl-4:4′-bisazo-β-naphthols (CAIN, COULTHARD, and MICKLETHWAIT), T., 2080.

$C_{32}H_{62}O_3S_2$ Anhydride, from sulphur chloride and silver palmitate (DENHAM and WOODHOUSE), T., 1866.

32 IV

$C_{32}H_{36}O_4N_2S_2$ *s*-Dibenzenesulphonyldiphenyloctamethylenediamine (LE SUEUR), T., 1121.

C_{33} Group.

$C_{33}H_{22}O_8$ Tetrabenzoylmethyltetritol (GILMOUR), P., 363.

$C_{33}H_{50}O_6$ Diacetyloleanone (TUTIN and NAUNTON), T., 2055; P., 301.

$C_{33}H_{56}O_6$ Cholesterol-*d*-glucoside (SALWAY), T., 1024; P., 170.

Sitosterol-*d*-glucoside (SALWAY), T., 1042; P., 170.

$C_{33}H_{66}O_6$ Ceryl-*d*-glucoside (SALWAY), T., 1027; P., 171.

C_{34} Group.

$C_{34}H_{38}O_{10}$ Pinacone from 2:3:4:2′-tetramethoxybenzophenone (SEN-GUPTA and WATSON), P., 270.

34 III

$C_{34}H_{24}O_3N_8$ Substance, from 1-*p*-tolyl-1:2:4-triaminonaphthalene and nitrosyl sulphate (MORGAN and MICKLETHWAIT), T., 76.

$C_{34}H_{40}O_4N_2$ Ethyl *αθ-di*-1-, and -2-naphthylaminosebacates (LE SUEUR), T., 1122.

$C_{34}H_{47}O_{11}N$ Aconitine, constitution of, and its chromate (BRADY), T., 1821; P., 253.

C_{35} Group.

$C_{35}H_{26}O$ 3:4-Diphenyl-2:5-dicinnamylidene-$\Delta^{3:4}$-*cyclo*pentenone (RUHEMANN and LEVY), T., 558.

35 III

$C_{35}H_{57}O_{13}N_{11}$ Gelatin, swelling of, with dilute acids (PROCTER), P., 370.

C_{36} Group.

$C_{36}H_{72}O_6$ Myricyl-*d*-glucoside (SALWAY), T., 1027; P., 171.

C_{38} Group.

$C_{38}H_{24}O_{11}$ Hydroxyquinol-benzein (GHOSH and WATSON), P., 10.

C_{39} Group.

$C_{39}H_{24}O_2$ Diphenylacetylenedi-β-naphtha*spiro*pyran (RUHEMANN and LEVY), T., 560.

C_{41} Group.

$C_{41}H_{64}O_{10}$ Tetra-acetylcholesterol-*d*-glucoside (SALWAY), T., 1025.
Tetra-acetylsitosterol-*d*-glucoside (SALWAY), T., 1025.

$C_{41}H_{74}O_{10}$ Tetra-acetylceryl-*d*-glucoside (SALWAY), T., 1029.

C_{42} Group.

$C_{42}H_{66}O_6$ Caulosapogenin (POWER and SALWAY), T., 198; P., 2.

42 III

$C_{42}H_{44}O_4Si_2$ Dianhydrotrisdibenzylsilicanediol (ROBISON and KIPPING), P., 348.

$C_{42}H_{44}O_4Sn_3$ Dianhydrotrisdibenzylstannanediol (SMITH and KIPPING), T., 2041; P., 280.

C_{43} Group.

$C_{43}H_{26}O_{10}$ Tetrabenzoylkaempferol (TUTIN), T., 2010.

$C_{43}H_{64}O_{27}$ Acetyl derivative from methylated cellulose (DENHAM and WOODHOUSE), T., 1741.

$C_{43}H_{68}O_6$ Caulosapogenin monomethyl ether (POWER and SALWAY), T., 200.

C_{44} Group.

$C_{44}H_{80}O_{10}$ Tetra-acetylmyricyl-*d*-glucoside (SALWAY), T., 1027.

C_{46} Group.

$C_{46}H_{32}O_{15}$ Acetyl derivative of hydroxyquinol-benzein (GHOSH and WATSON), P., 10.

$C_{46}H_{70}O_8$ Diacetylcaulosapogenin, and its sodium salt (POWER and SALWAY), T., 199.

C_{47} Group.

$C_{47}H_{62}N_6$ 1:2:3-Trisdiethylaminoanilo-4:5-diphenyl-$\Delta^{4:5}$-*cyclo*pentene (RUHEMANN and LEVY), T., 561.

C_{48} Group.

$C_{48}H_{42}O_2Si_4$ Trianhydrotetrakisdiphenylsilicanediol (KIPPING and ROBINSON), P., 375.

$C_{48}H_{93}O_9N$ Cerebrone, isolation and purification of (LAPWORTH), T., 1029; P., 175.

C_{50} Group.

$C_{50}H_{60}O_{10}$ Tetra benzoylhexadecyl-*d*-glucoside (SALWAY), T., 1029.

$C_{50}H_{74}O_{10}$ Tetra-acetylcaulosapogenin (POWER and SALWAY), T., 199.

$C_{50}H_{78}O_7$ Substance, from oleanone and dilute acetic acid (TUTIN and NAUNTON), T., 2057; P., 301.

C_{52} Group.

$C_{52}H_{80}O_8$ Acetyl derivative of substance $C_{50}H_{78}O_7$ (TUTIN and NAUNTON), T., 2057; P., 301.

C_{54} Group.

$C_{54}H_{82}O_9$ Diacetyl derivative of substance $C_{50}H_{78}O_7$ (TUTIN and NAUNTON), T., 2057.

$C_{54}H_{88}O_{17}$ Caulosaponin ($+4H_2O$) (POWER and SALWAY), T., 198; P., 2.

C_{56} Group.

$C_{56}H_{88}O_9$ Caulophyllosapogenin (POWER and SALWAY), T., 205; P., 2.

C_{58} Group.

$C_{58}H_{92}O_9$ Caulophyllosapogenin dimethyl ether (POWER and SALWAY), T., 206.

C_{61} Group.

$C_{61}H_{72}O_{10}$ Tetrabenzoylsitosterol-*d*-glucoside (SALWAY), T., 1025.

C_{66} Group.

$C_{66}H_{102}O_7$ Substance, from heating diacetyloleanol (TUTIN and NAUNTON), T., 2054.

$C_{66}H_{104}O_{17}$ Caulophyllosaponin (POWER and SALWAY), T., 204; P., 2.

C_{68} Group.

$C_{68}H_{100}O_{15}$ Hexa-acetylcaulophyllosapogenin (POWER and SALWAY), T., 205.

C_{70} Group.

$C_{70}H_{82}O_{10}$ Tetrabenzoylcaulosapogenin (POWER and SALWAY), T., 200.

C_{74} Group.

$C_{74}H_{108}O_{27}$ Deca-acetylcaulosaponin (POWER and SALWAY), T., 198.

C_{84} Group.

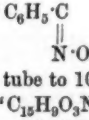
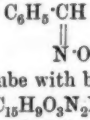
$C_{84}H_{86}Br_2$ Substance, from 2:2′-dibromodiphenyl and sodium (DOBBIE, FOX, and GAUGE), T., 38.

C_{86} Group.

$C_{86}H_{124}O_{27}$ Deca-acetylcaulophyllosaponin (POWER and SALWAY), T., 204.

ERRATA.

Vol. CIII. (Trans., 1913).

Page	Line	
153	27	*for* "ethyl di-*p*-toluoyl-." *read* "ethyl di-*p*-nitrobenzoyl-."
165	1	asterisk refers to footnote on p. 164.
611	16–17	*for* "whence $[\alpha]_D$ + 7·21° and $[M]_D$ + 22·9°" *read* "whence $[\alpha]_D$ + 3·72° and $[M]_D$ + 11·8°."
	Fig.	
638	1	Ordinates: *for* "1·200" and "1·400" *read* "1·02" and "1·04" (upper curve should accordingly be much steeper).
947		in formula II *for* *read*
	Line	
1565	19	*for* "bromobenzene" *read* "bromonaphthalene."
1571	20	,, "derived" *read* "derivative."
1582	5	,, "$C_{14}H_{14}O_{12}Ba_3$" *read* "$C_{14}H_{14}O_{12}Ba_3,4H_2O$."
1588	7* and 26*	in equation *omit* "+ H_2O."
1613	16*	*for*  *read* 
1624	6	,, "tube to 100*" ,, "tube with benzene to 100°."
1852	13	,, "$C_{15}H_9O_3N_2$" ,, "$C_{15}H_9O_3N_2Na$."
1928	1*	,, "marked" ,, "masked."
2301	2*	,, "Willsdon" ,, "Willson."
2311	29*	

* From bottom.